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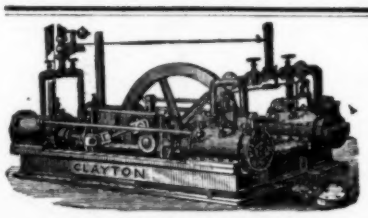

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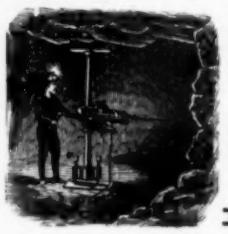
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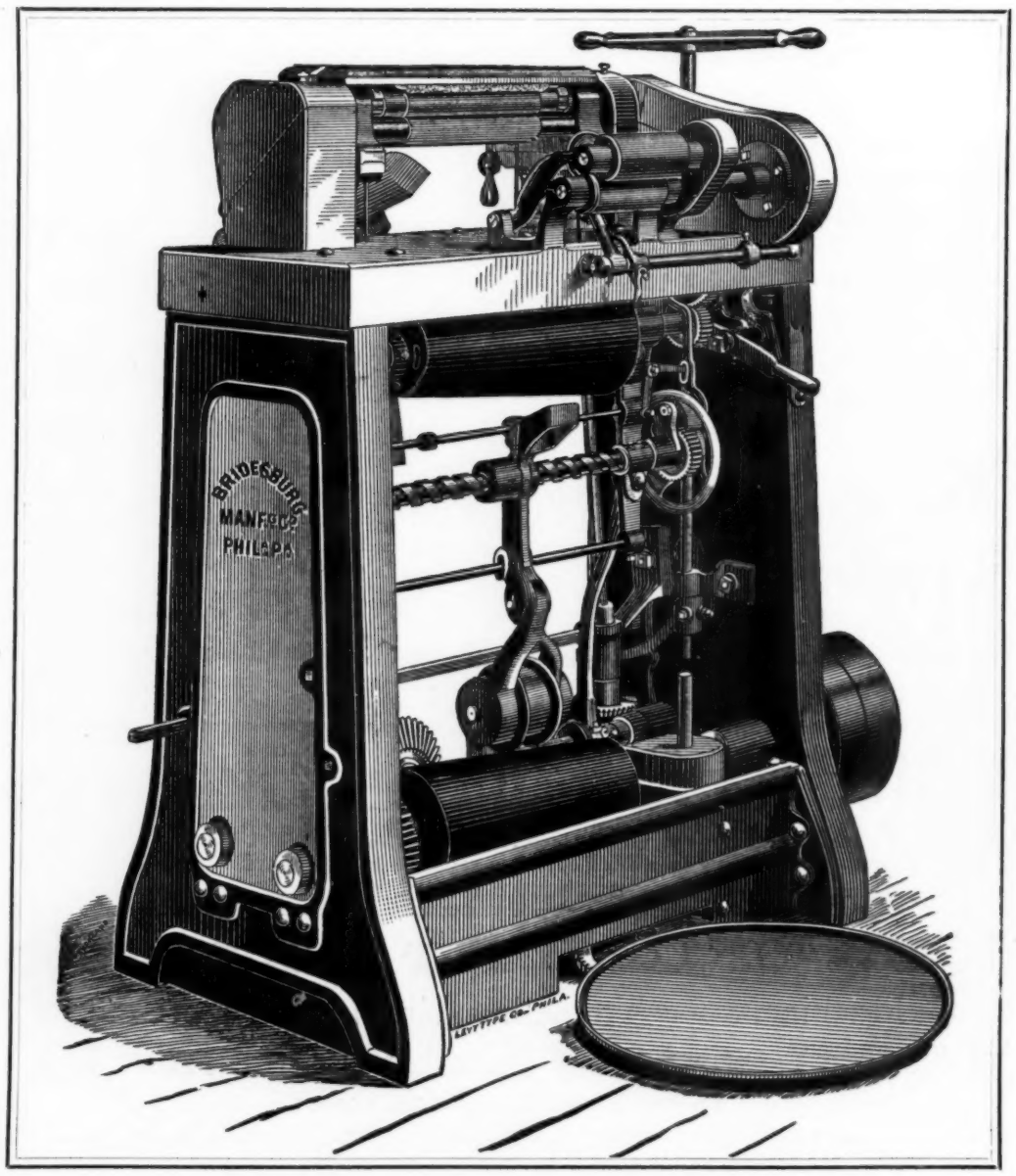

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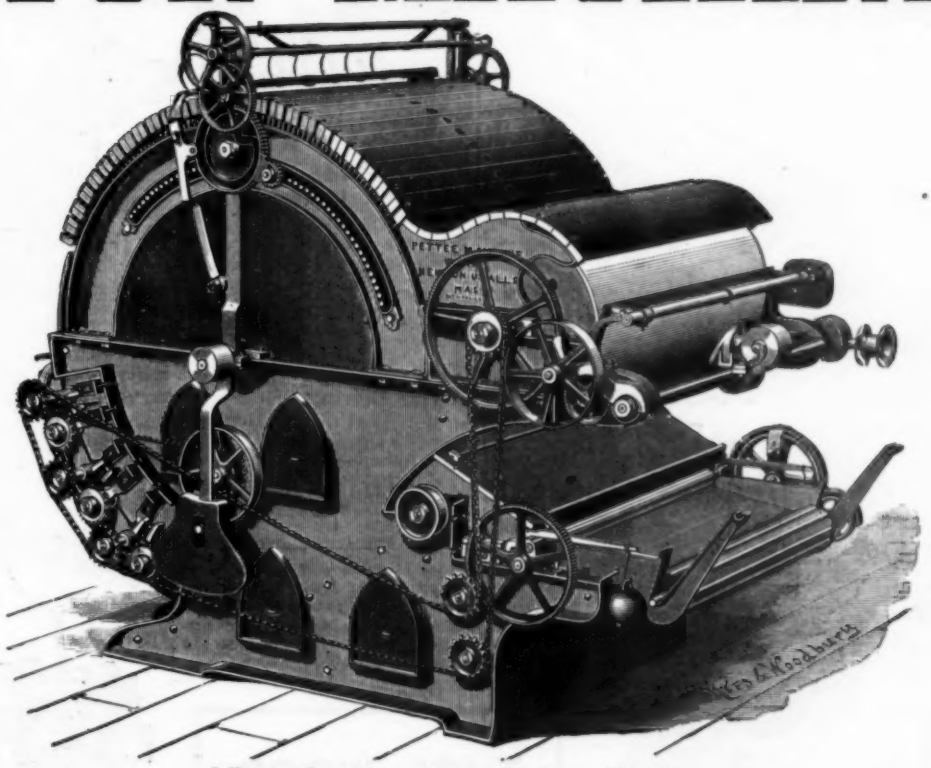

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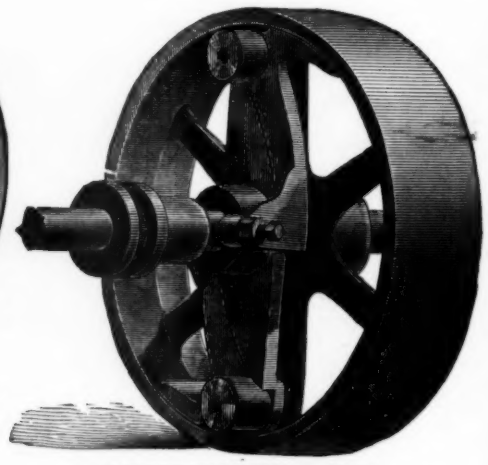

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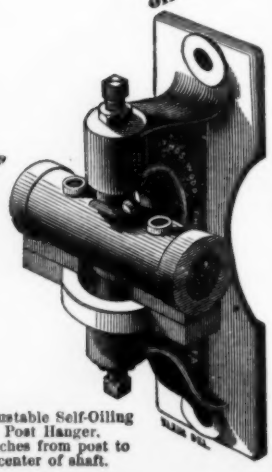

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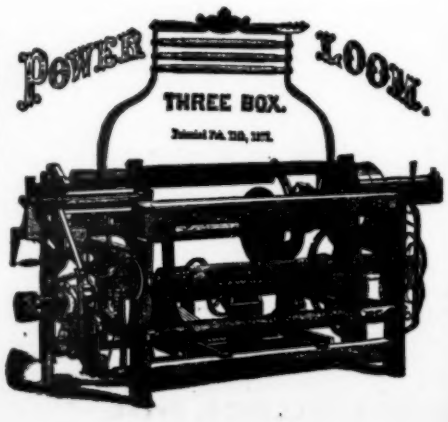

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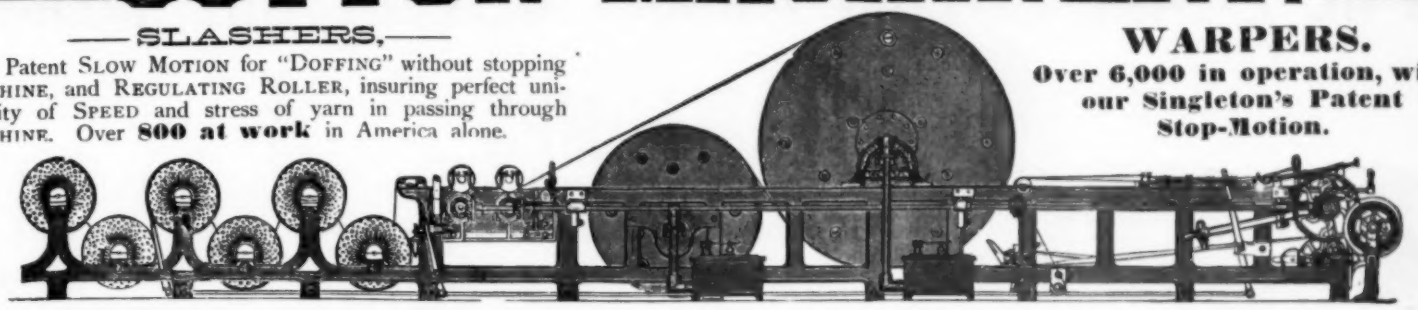

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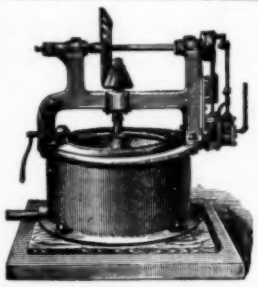

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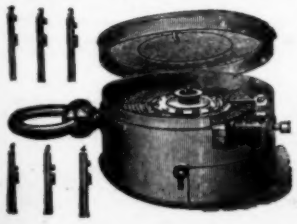

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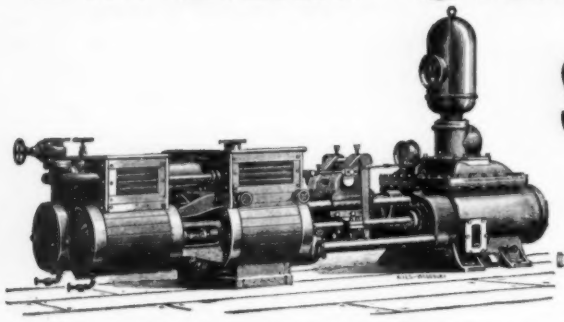

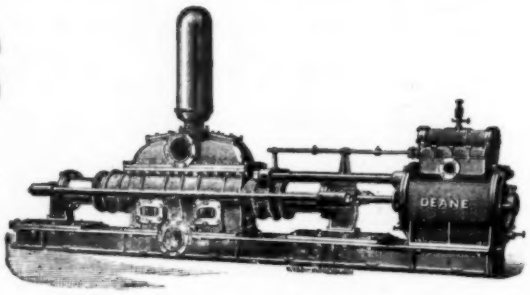

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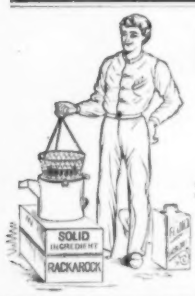

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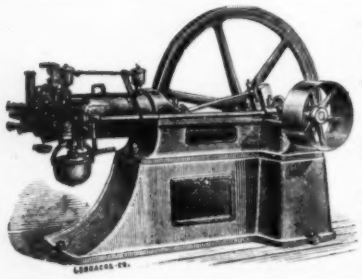

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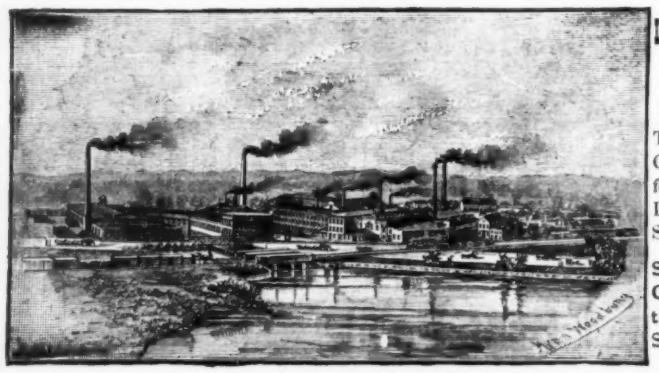

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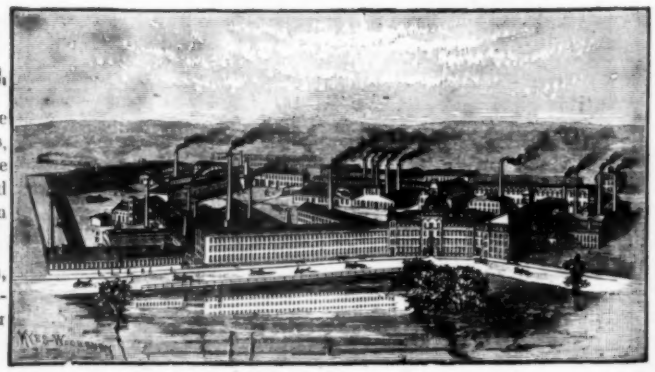

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BALTIMORE, JUNE 7, 1884.

Pig-Iron Making in the South.

Some weeks ago Mr. Samuel Noble, a successful iron maker of Anniston, Ala., reviewed the history of iron making in that State, showing that nearly all the coke furnaces in Alabama had failed and passed out of the hands of their original owners. Mr. Noble's letter, whether such was his intention or not, has been construed to mean that Alabama is not a profitable field for iron making. We think, however, that despite the record of many failures. pig iron can be produced very cheaply in that State, as well as in several other Southern States. The difference, however, in cost between pig iron in the South and in Pennsylvania is not probably as wide as some claim, nor is it sufficient to enable Southern furnaces to make large profits on iron shipped to consuming markets at a cost of $4 to $6 a ton freight. That there have been many failures counts for very little. Mr. M. F. Maury, of Cincinnati, in a letter to the Iron Age, says if the history of any iron district in America is examined, it will be found that its pioneer years are marked with as many wrecks as is Alabama, with perhaps the single exception of the Lake Superior charcoal furnace region. These failures are not so much due to any disadvantages of the locality as to lack of experienced management. The successful working of a small furnace is by no means a guarantee of ability to properly manage a large one.

In the South, as well as in other iron regions, during the first years of the development of the iron resources there was a remarkable disposition among capitalists totally unacquainted with the iron business to invest in furnaces. Often these furnaces were located by inexperienced men, only to discover after being built that their position was very bad as regards getting the raw material. The history of many furnaces will demonstrate the truth of this. Then some of them have been managed by men of no practical experience in iron making, and others by men who could run a five or ten-ton furnace, but had not the ability to operate one of 50 or 100 tons capacity. A close examination of the record of every Southern furnace that has failed would show that nearly all of their troubles were due to some one or more of these causes, and not to any inherent disadvantages of the South for making cheap iron.

The successful iron makers are very slow to give up an established business and move to new regions; but when they do so, they are very apt to look well to the advantages and disadvantages of location, as well as to see that their furnaces shall have the very best management in every department. The South had to pass through its pioneer days of misfortune in iron making, just as all other iron centres; but the advantages of that section for this industry are so great that a permanently successful business is sure to follow after it draws to it the proper experience and management.

As we have so often said in the past, there is, in our opinion, a greater need at the South now for more rolling mills, bridge works, and other consumers of pig iron, than for more pig iron producers. It is true that the amount of pig iron now produced in the South is scarcely one-half of the quantity used in making the finished iron and steel used in that section; but this metal is very much in the same condition that cotton formerly was. It is, in one sense, a raw material, like cotton; and, like cotton, it is shipped North to be turned into finished iron, and then returned to the South, paying heavy freights both ways. As the South is rapidly increasing its facilities for manufacturing cotton, so it must prepare to take its own pig iron and produce the finished goods needed. Mr. Maury, whom we have already quoted, says:

"Whenever railroads have connected Southern coal and iron, development thereof has rapidly followed. Thus, in Virginia there was not a single coke furnace in 1873, in which year railroads joined the coal and iron fields, and since when 11 furnaces have gone into blast In Tennessee there was no coke furnace in 1867; now there are 8. In Alabama the first one blew in in 1876, and now there are 10.—Here is the striking fact that prior to 1867 there was not a single coke furnace in these three States, and now there are 29, representing many million dollars original investment, and it is a fair conclusion to draw that the last 10 or 15 would not have been erected if the previous ones were all dead failures. * * *

On January 1, 1883, out of the 17 coke furnaces under construction in the United States 10 were in this "wrecking" belt in Virginia, Tennessee and Alabama, leaving only 7 for the other 21 iron-producing States of the Union. It must be borne in mind that iron declined all through 1882, and hence there must have been some good inducements for the South to have this preponderance in construction."

The New Orleans Exhibition.

From present indications the New Orleans Exhibition will be a magnificent success, surpassing the utmost expectations of those who first planned it. It has undoubtedly been managed thus far with consummate ability, and now that sufficient financial aid has been secured it can be pushed with still more vigor. We have already expressed our belief that in many respects this exhibition will surpass any other ever held,—even the great Centennial of 1876,—and the more closely we study the progress already made, the more fully are we convinced of this. The Centennial labored under the disadvantage of being unpopular in the beginning, and of having to contend to some extent with the jealousies of other cities. Moreover, the country was then still in the midst of the severe business depression which lasted from 1873 to 1879, and merchants and manufacturers were hardly in a position to enter willingly upon the preparation of expensive exhibits, and especially as that being the first world's fair ever held in this country they did not fully appreciate the benefits that would flow from it. Despite these drawbacks it was such a wonderful success that it was supposed to be the supreme effort of this great country in the exhibition line, and few looked for its equal in America during the present century at least.

New Orleans, however, is preparing to surpass that magnficent exhibition, and she has many advantages in her favor. The South is now attracting more attention in the industrial world than any other country either in America or in Europe; her marvellous resources are being developed as never before, and millions of dollars from the North, as well as from Europe, are being literally poured into that section, while immigration is rapidly increasing the population of the Southern States. The world stands ready, therefore, to more fully investigate the claims of the South as a place of business as well as a place of residence.

The New Orleans Exhibition will afford the best opportunity that could possibly be given for this. While it will be international in its scope, it will be especially an exponent of the vast resources and of the rapid progress of the South. More visitors will probably be attracted there for the one purpose of studying the South and the South's advantages than for all other objects combined, and on this account it is essentially important that the Southern States be fully represented. Every State in the South should do its utmost to present a complete and perfect exhibit of all its resources, and the State that makes the best display will assuredly reap the most abundant rewards. The South has never had such a chance to let the world know of its marvellous wealth, and many years must elapse ere another opportunity of this kind will be presented; so that it behooves her people to strain every effort to make an exhibit that will astonish the world—an exhibit that will bring untold millions of money and thousands and hundreds of thousands of immigrants to the sunny South.

Crops in the South.

Elsewhere in this issue we have given a few extracts from Southern papers, showing the condition of the wheat and oat crops in different parts of the South. The outlook, as indicated by these reports, points to the most abundant wheat crop ever gathered in the South, with a fairly good crop of oats, while of fruits and early vegetables the yield is also unusually large. It is true that from some few places in the South there are complaints, but we do not remember ever to have seen such remarkably favorably reports from nearly every section of the Southern States as are now coming in. We could readily fill an entire issue of the MANUFACTURERS' RECORD with extracts from Southern papers reporting the outlook for the early summer crops as unusually good, but give only enough to show their general drift.

It is yet too early to make any predictions as to the corn and cotton crops—the two most important items in Southern agriculture; but the outlook for them is, on the whole, we think, very satisfactory. The large early summer crops of wheat, oats, fruit, &c., will materially aid the farmers of the South, and will within a few weeks put quite a liberal amount of money into circulation, giving some impetus to business generally. Later on, should corn and cotton give fine yields, as there are good reasons for anticipating, the South would be in a very prosperous condition, and the industrial development of that section would make far more rapid progress than ever before. Last year's crops were unusually small in the South, and the farmers in that section not well fixed financially, but still we have seen a marvellous increase in the manufacturing interests of all the Southern States. If this has been done during a year of depression and of very short crops, what may we not expect if crops should be large this year?

THE Dayton Coal and Iron Co., of Dayton, Tenn., a company of very wealthy Englishmen, have commenced work on building two large furnaces at Dayton, mention of which we lately made. These furnaces are to have an aggregate capacity of over 70,000 tons of pig iron a year. They will be constructed in the very best manner.

THE decline in the price of locomotives is so great that an Eastern company, which a little over a year ago sold a certain kind at $15,000, has accepted an order for building ten exactly similar at $8,000 each.

How the South is Progressing.

SOUTHERN OFFICE
BALTIMORE MANUFACTURERS' RECORD,
ATLANTA, GA., May 26, 1884.

At home here we have no idea of the extent of industrial development that is going on among us. Men are building big manufacturing enterprises and saying nothing about them; creating them without word or aid; and we strike upon consummated projects stuck quietly off in some unheard-of locality that amaze us with their value and astound us with their existence.

Last Saturday I was thus astonished. Mr. Brady, of the firm of Miller & Brady, invited me to go to Foster's Mills on a picnic. The place used to be a grist mill—a country corn mill. I found a fine stately underwear factory just completed and in operation. It cost $40,000, and works 50 hands. It is the only knit underwear mill in the South, save one in the upper part of Virginia. It was built by two Georgia brothers named Foster, from Morgan county in this State, built entirely with their own capital, and is a model of its kind.

Mr Foster as a boy and youth spent some time in Cohoes, New York, and was there impressed with the neatness and methods of underwear mills there. The manufacturing idea is seizing our folks, and he got irresistibly into the current. He had means, and this splendid factory is the result. He has obtained his heads of labor from the Northern factories, but all the rest is home country labor picked up right here.

Mr. Foster has water power. He uses two bales of cotton a day and makes at full about 800 shirts and drawers a day of the best quality and all sizes. His shirts retail at $1 each. His $100 of raw material thus brings retail $800 of products. He has a contract for all the goods he can make, and his profit even with unskilled help is fine. His labor will run 50% cheaper than the same class of work at the North. His hands are daily improving. He has liberally enough paid them by the day while learning, and now when trained he pays them by the piece, thus allowing them to make as much as their rapidity and skill will allow.

This mill is a new departure and a successful project. It was a great surprise to light upon a blooming little village of 150 people, created like magic off at a cross roads grist mill in the woods. The work is very pleasant. There is none of the dust and clatter of the ordinary cotton mill, but the women sit in a large cool room and run their various machines in a leisurely and comfortable sort of way. The machines are very interesting. After the thread is made then the knitt ng machines turn out automatically the round rolls of body. The cutter cuts out the garments. The sewing machines sew up the arm and leg seams and bind the edges. The louper tacks together the cuffs and anklets to the arms and legs, and after the washing the patent ironer rapidly irons them.

This factory is a good specimen of how things are working with us. Here, without any blow, has sprung into operation as neat and compact a little factory as can be seen anywhere It is the conception of a Southern brain, built with Southern money on Southern soil, and operated with Southern labor, directed by a Southern intelligence. Such achievements carry their own lesson, and speak loudly of Southern progress.

Mr. Foster began work on his mill last June. In less than a year it is in operation and he is shipping to the North his heavy boxes of first-class goods. He is very proud of his little factory, and is making profits that delight him and that will steadily increase as his labor improves.

I. W. AVERY.

Crop Prospects in the South.

In the South, probably more than in any other section, the condition of business depends upon the crops. While the Southern people are rapidly turning their attention to manufactures, yet agriculture is still the greatest interest, and prosperity among the farmers means great activity in business. Should the South be blessed this year with large crops the latter part of 1884 and the early part of 1885 would witness probably the heaviest volume of trade ever done at the South. Much of this activity would show itself in new industrial enterprises, and we might safely count upon a remarkable addition to the South's manufacturing interests. Looking at the matter from this point of view, manufacturers, capitalists, machinery makers, &c., are all deeply interested in the crop prospects of the South. As we have previously said, the increase in the wheat acreage of the South this year is 750,000 acres compared with last year. As to the prospects for a large wheat yield, we take the following points from Southern papers:

The wheat crop is good and promises an abundant harvest.—*American*, Cartersville, Ga

Prospects of the wheat crop were never better in this section than at the present time.—*News*, Bristol, Tenn.

The crop prospect at this writing is splendid.—*Union*, Milledgeville, Ga.

Wheat is reported considerably above an average in this section. Crops generally are very promising.—Athens (Ga.) correspondent *Chronicle*, Augusta.

The wheat crop is excellent.—*Reporter*, Durham, N. C.

From all directions there promises to be a plentiful harvest of small grain. The crops of oats, rye and wheat are said to be luxuriant.—*Bud*, Clayton, N. C.

Crop prospects very flattering Wheat never looked more promising.—*Reporter*, Danbu.y, N. C.

Crops in adjoining counties, especially wheat and oats, are very fine—finer than for many years.—*Economist*, Elizabeth City, N. C.

Crops of all kinds looking splendid; said that there will be more wheat produced in this county than in five years—*Enquirer*, Monroe, N. C.

Crops around Scotland Neck reported in excellent condition, with more diversity of crops than for years past.—*News*, Roanoke, N. C.

Wheat in East Tennessee reported as in excellent condition, and the prospect for a large yield is the finest that has been at this time of the year for fifteen years.—*Banner*, Nashville, Tenn.

Outlook for good crops in this section for the coming year is very good.—*Mercury*, Farmville, Va.

The season up to the present time is one of the best ever known, and the indications point to unheard of crops It is altogether likely that the cotton and corn crops this year will be the largest ever known.—Columbia, S. C., correspondent *Constitution*, Atlanta, Ga.

Forsyth county will harvest one of the largest wheat crops known in her history.—*Sentinel*, Winston, N. C.

A more abundant crop of wheat was never harvested than is now turning golden in a thousand waving fields.—Another fortnight and the time of reaping will be upon us. Within a few days copious rains have fallen, proving a blessing to young cotton and corn at a time when most acceptable.—Correspondent *News and Courier*, Charleston, S. C.

The wheat prospects were never better.—*Press*, Salem, N. C.

From present indications there will be an exceptionally good yield of wheat and oats.—*Advance*, Canton, Ga.

On every hand one hears of the flattering prospect of the wheat and oat crops. They are simply in that condition known as booming.—*Herald*, Newberry, S. C.

Wheat is looking splendidly and will be ready to harvest in a few days.—Lexington, Ga., correspondent *Chronicle*, Augusta, Ga.

The wheat crop is unusually good in this section.—*Chronicle*, Charlottesville, Va.

Prospect for a wheat crop is better in Elbert county than for a number of years. *News*, Savannah, Ga.

We are aware of the fact that we have before mentioned the magnificent condition of the oat, rye and wheat crop, but it is really so fine that the telling of its condition will bear repetition.—*American*, Statesville, N. C.

North Georgia.

An Opening for Capitalists.

From the time of the earliest settlement of the United States we have heard of the "Sunny South;" the very name conveying to the mind of a Northern man visions of a beautiful land, where it is a perpetual spring, and life is made new again by a mild and healthful climate. Of late years the South has developed a new interest in the world, and is fast gaining a reputation for the wealth in her many hidden resources, so much so that the tide of immigration is fast heading its way south, and capital is seeking investment here as it flowed to the Pacific slope "in the days of '49."

Georgia is to-day the New England of the South, and is making rapid strides towards becoming one of the principal manufacturing centres of the continent.

She has superior commercial advantages to any State in the Union. She has the best of railroad connection with every section of the North and West. In the South she is at home. The finest harbors on the Atlantic coast are within her boundary.

The raw material of every kind and description are at her very doors, which to-day is being shipped to foreign factories, while the great water power of her rivers is wantonly allowed to run waste.

My attention has been specially called to one great power in particular, which, before the war and at the time Sherman's army spread desolation from Chattanooga to the sea, was in the heyday of its development, and over two thousand souls answered to the call of the pay-roll.

The property consists of over seventeen thousand acres of land, situated at the extreme southern end of the Blue Ridge Mountains, in Bartow and Cherokee counties, Georgia.

The beautiful Etawah River flows through the property for a distance of over four miles; in this distance there is a fall of over seventy feet in the bed of the river, furnishing four available water-powers, aggregating over eleven thousand six hundred horse, which can be made available at an expenditure of less than thirty thousand dollars. Much less than a fourth of this power has ever been utilized, and yet there has been upwards of two million dollars invested in manufacturing enterprises on this property. It may not be out of place here to give a brief summary of some of these enterprises, which were in successful operation before the war, and were at that time wiped out by the forces under Sherman, leaving nothing but the ruins and their massive walls in their picturesque desolation, bearing silent testimony of wealth and labor destroyed; a rebuke that it is still permitted to run waste.

There were at this time in successful operation three blast furnaces, each making from ten to twenty tons per day of fine charcoal iron; an extensive rolling mill for making merchant bar, boiler plate and railway iron; a large foundry for making all kinds of castings, from stove plate to pipe and heavy ordinance; one nail and spike mill; one merchant flouring mill having a capacity of two hundred and fifty barrels per day; two grist mills for corn; two saw and planing mills; one brewery; one woolen mill;—in fact, almost every branch of manufacturing industry was carried on here, for the raw material of every kind was close at hand.

There are in the property practically inexhaustible deposits of the finest quality of brown hematite and specular iron ores, and similar extensive deposits of manganese ores, quarries of the finest limestone, with direct communication by railroads to the coal fields of Georgia, Alabama and Tennessee. The land is mostly covered with a second growth of timber from twenty-five to thirty years old, which will furnish more charcoal to the acre than the original forest, and can be delivered at the furnace at five cents per bushel.

The property is within the cotton-growing belt of the Southern States, with railroad communication to every section, as well as being in one of the most fertile and productive agricultural sections of the State. It is but forty-two miles from Atlanta, ninety-two miles from Chattanooga, with numerous smaller towns in the immediate vicinity.

The climate here is delightful,—the summers pleasant, the winters mild,—and the water good. What more could be asked than is here set forth to build a great manufacturing city? And yet I have sketched but a few of its many resources.

The original proprietors owned hotels and warehouses, operated a line of railway three miles from their town of Etawah to the junction with the Western & Atlanta Railroad; the road-bed is to-day in fine condition; the town in ruins.

The property is within the gold belt of North Georgia. Some washing has been carried on, though no extensive development has been made.

A fine bed of sandstone extends through the property; in some places it is found flexible, in others hard and fine-grained.—A ledge of baryta has been traced through the property, but is at present undeveloped.

It would be impossible to estimate the real value of the above property; it can only be done when capital has fully developed all its resources. The water power alone, estimated by a comparative value with the cost of the Augusta power, is worth many times the value for which it is held by the present company, of which Capt. Cain Glover, of Rome, Ga., is president.

Never since the war has this property been in shape to place before the public until the present. Owners gathered together the varied interests. These gentlemen are not in a financial condition to fully develop this property and its resources, but stand ready to combine their interests with parties having capital to do it, or will sell the property to them.

It is worthy the investigation of capitalists.

White's Flexible Metallic Fillet for Pattern Makers.

It is necessary to say but few words in regard to the advantages of White's Flexible Metallic Fillet, for pattern makers, which we illustrate, over anything that has heretofore been used, and those who study the interests of their employers realize at

once the time and labor saved by its use. It not only gives a better finish to patterns, but may be applied in one-tenth the time required to carve wood fillets, and makes a permanent job, not being affected by either heat, cold or moisture. It is endorsed by those who have used it as the best fillet made. Further information can be obtained from the H. B. Smith Machine Co., 925 Market street, Philadelphia.

New Direct-Acting Steam Pump.

The Valley Machine Co., of Easthampton, Mass., have lately added to their list of manufactures a direct-acting, or automatic valve-motion, steam pump, for which the makers claim extreme simplicity with all the advantages incident thereto.

The accompanying engravings give a very clear idea of the construction and action of this machine. Fig 1 is a plan of the steam valve seats, with the ports for both main and supplemental valves. Fig. 2 exhibits the steam chest uncovered and the valves in position. Fig. 3 represents the supplemental valve, and Fig. 4 the main valve. Fig. 5 is a perspective view of the machine.

Referring to the details of the design, we may add to the foregoing that both the main and supplemental valves are flat slides working on the same plane, the main valve having a groove cut through the face, thus making a double-faced valve of it. The supplemental valve likewise is double-faced, the two faces being connected by a web. This web fits into the groove in the face of the main valve, and allows both valves to slide on their seats, independently of each other. The main valve is worked from the valve piston, and the supplemental valve from the tappet arm. The valve seats, piston rod, stuffing boxes and glands, water piston and head, tappets on the valve rod, and other parts where it will answer a better purpose than the cheaper metals, are composition metal.

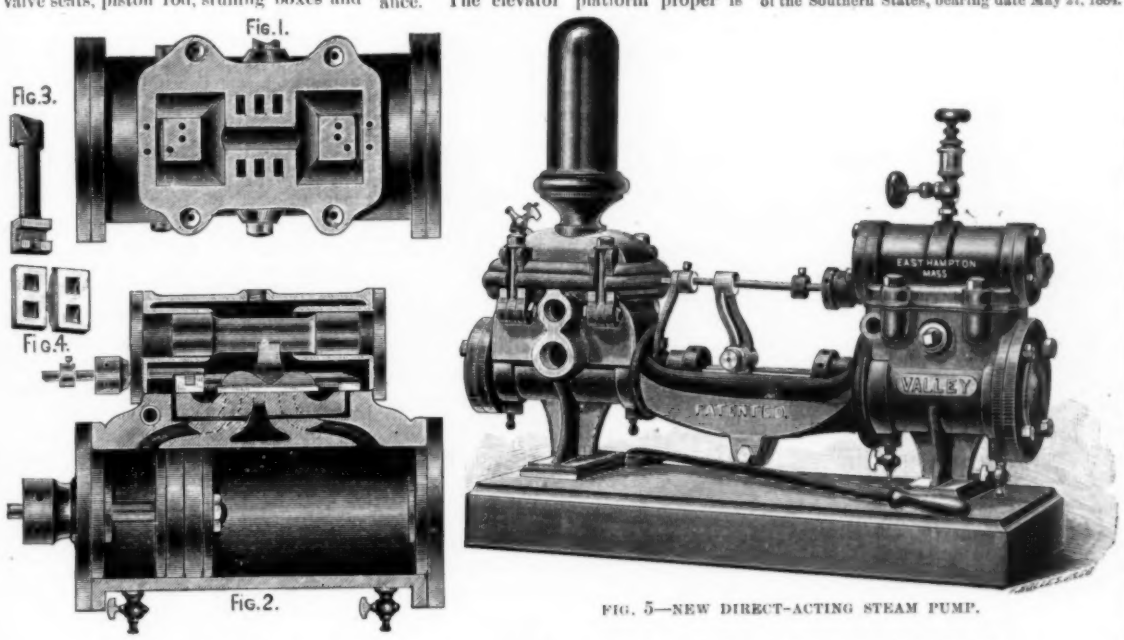


FIG. 5—NEW DIRECT-ACTING STEAM PUMP.

From the foregoing description our readers will be able to form a correct estimate of the efficiency of this admirably simple steam pump. We must refer to the makers, the Valley Machine Company, of Easthampton, Mass., for additional particulars.

Don't Forget the Little Ones.

How many a young heart has been made glad in anticipation of a visit to the great metropolis. The cost of bringing wife and child, or children, as the case may be, especially if you stop at the Grand Union Hotel, opposite Grand Central Depot, and save $3 carriage hire and expense of baggage transfer, will prove but nominal compared with the happiness imparted. When again visiting New York via Grand Central Depot, bring your family and enstall them in one of this hotel's elegant suites, where they can live better for less money than at any other strictly first-class hotel in the city; and in place of hiring a hack for sight-seeing, you can step on the Third or Sixth avenue elevated trains, horse-cars or stages, and reach any point of interest in a few minutes, including the great Brooklyn bridge, at the rate of 5 or 10 cents each. Remember these facts and prove them at your first opportunity. ‡

Something about Elevators

Messrs. Clem & Morse, elevator builders, Philadelphia, have just been awarded a contract by J. T. Farren & Co., of Baltimore, to erect one of their one-ton capacity Albro-Hindley screw elevators, with patent automatic hatch doors.

In a recent test made by Prof. R. H. Thurston, at the Stevens Institute of Technology, it was demonstrated that the co efficient of friction in the Albro-Hindley screw gearing used by Clem & Morse in their elevators is only about one-half as great as in the best straight worm gearing, such as is used by other elevator builders. The following description of their patent pneumatic safety clutch, clipped from a recent issue of the Albany (N. Y.) Morning Express, will prove interesting to all users of elevators:

ELEVATOR EXHIBITION.

"Messrs. Clem & Morse, of Philadelphia, have recently put three elevators in the new Arcade Block on Hudson avenue. One of these is supplied with the new improved pneumatic safety catch, and two exhibitions were given yesterday to test its utility. The first exhibition occurred at 10 A M, a number of prominent citizens, manufacturers and newspaper representatives being present; and the exhibitor, Mr. Wm. P. Gorges, explained the new appliance. The elevator platform proper is guid d by ash strips, three inches wide, and extending the full depth of the well. The safety catch is attached to the bottom of the platform and consists of a half-inch poplar board resting on springs; any pressure on this sub-platform causes two steel shafts, the full width of the platform, to revolve. The shafts are furnished at either end with toothed eccentrics, which, the moment the shafts revolve, clutch the ash guiding strips, and motion is almost immediately arrested. The appliance works automatically by means of atmospheric resistance of the air beneath the elevator, caused by the accelerated speed incidental to a breakage of the cable. The elevator was raised about ten feet at the morning exhibition, and the cable separated at that distance.

In the afternoon, at three o'clock, a representative of the Express was present, and saw several much more satisfactory tests. The reporter thought that the exhibition would be more interesting if the rope was cut at a greater elevation, and the exhibitors, Prof. Richard Prescott, E. E. Mack, Esq., and Mr. W. H. Paddock, placed themselves upon the elevator, which rapidly ascended to midway between the fourth and fifth stories, when Mr. Gorges mounted to the cross-piece armed with a keen-edged hatchet. The *voyageurs* held their breaths as the edge was applied to the rope; the rope separated and the elevator fell—1½ inches, and with scarcely a shock. The apparatus was lowered and the party ascended once more, and this time a very practical and unexpected test resulted; the rope accidentally parted of its own accord and the catch again worked to a charm. It occurred to the Express man that in the event of one being caught at the bottom of the well while the elevator was descending, he might prevent himself from being crushed to death by striking the safety catch with his hands as soon as it came in reach. Mr. Gorges was glad to be afforded the opportunity of trying the experiment, and, accompanied by Mr. Paddock, he descended to the bottom of the well, while the elevator, under charge of Prof. Prescott, was rapidly lowered from the fourth story. The experiment was entirely successful and the platform stopped just three inches above the gentlemen's heads. After a careful examination we were at a loss to determine how any device could be more perfect and safe than the one exhibited." Clem & Morse are represented in Baltimore by Messrs. Morton, Reed & Co., 61 German street.

List of Patents.

The following patents were granted to citizens of the Southern States, bearing date May 27, 1884.

Reported expressly for this paper by Louis Bagger & Co., mechanical experts and solicitors of patents, Washington, D. C.

299,320. Baker, W. S. G., Baltimore, Md. Car axle-box.
299,321. Baker, W. S. G., Baltimore, Md. Car axle lubricating device.
299,335 Bolgiano, G. C., Baltimore, Md. Sash holder.
299,337. Brotherhood, Fred., Charleston, S. C. Apparatus for washing phosphate rock, ores, &c.
299,339. Buchnan, W. M., Columbia, Tenn. Two-wheeled vehicle.
299,340. Burner, C. C., Traveller's Repose, W. Va. Grinding mill.
299,342. Caldwell, W. J., Rives, Tenn. Car starter.
299,347. Chisholm, W. R., Laredo, Tex. Irrigating apparatus.
299,201. Clark, E. S., The Plains, Va. Car-coupling.
299,349. Clayton, G. A. F., Masonville, Va. Saw set.
299,207. De Blanc, G. S., New Orleans, La. Street car fare-box.
299,119. Dueber, J. C., Newport, Ky. Manufacture of watch-case centres.
299,361. Eiker, T. B., Baltimore, Md. Head-rest.
299,378. Green, J. J., Jackson, Miss. Removing fiber from cotton seed.
299,139. Heflin, C. D., Roanoke, Tex. Cotton press.
299,224. Humbert, J. H., Onan, Va. Lifting jack.
299,398. Jones, Jacob, Baltimore, Md. Letter-opener.
299,404. Knapp, G. W., Baltimore, Md. Machine for forming taper tubes.
299,233. Liddell, W. J. F., Charlotte, N. C. Circular saw-mill.
291,246. Murphy, R. T., Westminster, S. C. Sash-fastener.
299,160. Parrish, Henry, Horace, Ga. Cultivator-plow.
299,248. Myers & Kelly, Memphis, Tenn. Combined cotton-chopper and scraper.
299,417. O'Sullivan, M. J., Baltimore, Md. Call-box for district telegraphs.
299,494. Price, Anna J., Frostburg, Md. Caster for stoves.
299,620. Price, Geo. W., Baltimore, Md. Rotary steam engine.
299,273. Reynolds, Terrence, Atalla, Ala. Dumping car.
299,439. Tabony, J. H., New Orleans, La. Meat-clamp.
299,441. Whitlock & Etheridge, Paris, Tenn.—Plow.

NEW PUBLICATIONS.

THE May number of the Southern Historical Society Papers contains some valuable contributions to history. The contents are "Reconstruction in South Carolina," by Prof. F. A. Porcher; "Story of the Arkansas," by Geo. W. Gift; "Letters from Ft. Sumter," by Lt. Iredell Jones; Diary of Rev. J. G. Law; "Chickamauga," a reply to Maj. Sykes, by James M. Goggin, A. A. Gen. McLaws' division; report of Gen. E. W. Pettus of Operations at Lookout Mountain; Battle of Drewry's Bluff, May 16, 1864; report of Gen. R. F. Hoke; report of Gen. Johnson Hagood; Woolsley's Tribute to Lee and Jackson; The Burning of Columbia—Affidavit of Mrs. Agnes Law, etc. This publication is issued monthly by Southern Historical Society, under the editorship of J. Wm. Jones, the secretary. It is invaluable to those who want to get at the truth of the history of the civil war, as furnished by the principal participants themselves.

THE CHRISTIAN UNION.—Emerson once said of Mrs. Helen Jackson ("H. H.") that she stood on the threshold of a great achievement. The large and increasing circle of her readers are doubtless satisfied that Mr Emerson's prophecy was fulfilled years ago; if any doubt remained, it would certainly be removed by the beauty, pathos and power of Mrs. Jackson's story, "Ramona," now being published in The Christian Union, 20 Lafayette Place, New York. For dramatic interest, narrative skill and deep feeling no story of recent years has equalled it.

The *State Chronicle*, of Raleigh, N. C., of May 31, consisted of 12 pages, devoted wholly to the rapidly growing tobacco interests of North Carolina. It was a magnificent number of that most enterprising journal, reflecting great credit upon all connected with it. The edition was 25,000 copies, which we suppose is the largest number ever issued at one time by any paper in North Carolina.

A pamphlet of about 70 pages, entitled SALEM AND THE ROANOKE VALLEY, has been issued for free distribution, with a view of setting forth the many advantages of Salem, Va., for trade and manufactures, as well as a place of residence. It contains much information of interest. Copies can be had of J. T. Crabtree, Salem, Va.

Important to Southerners.

Persons arriving in New York via Cortlandt Street Ferry, by taking the 6th Avenue Elevated Train, corner Church and Cortlandt streets, can reach the Grand Union Hotel in 42d street, opposite Grand Central Depot, in twenty minutes, and save $3 carriage hire. If en route to Saratoga or other summer resorts via Grand Central Depot, all baggage will be transferred from hotel to this depot free. 600 elegantly furnished rooms $1 and upwards per day. Restaurant the best and cheapest in city. Families can live better for less money at this hotel than at any other first-class hotel in the city. ‡

CONSTRUCTION DEPARTMENT.

We publish, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

B. G. Lockett & Co., Atlanta, Ala , will build the large freight depot to be erected at that city by the Georgia Pacific Railroad.

The Charleston Bridge Co., Charleston, S. C., will probably award contract for a $50,000 or $60,000 iron bridge some time in June. Bids desired.

The Richmond Cedar Works Co. of Richmond, Va., whose mill was burned some time since, causing a loss of $75,000, have commenced work on their new buildings. We reported at the time of the fire that the works would be rebuilt. Will require a 300-horse power boiler.

Fuller & Basil, Russell, Ky., are putting up a saw mill.

The Soddy Coal and Coke Co. of Chattanooga, Tenn., are making extensive additions to their plant at Soddy, Tenn., putting up coal washers, crushers, elevators, conveyors, &c.

The Norton Iron Works of Ashland, Ky., are making good progress in rebuilding their extensive works. It is probable that they will be ready to start up in August.

A. M. Riggsbee, Durham, N. C., contemplates erecting a hotel.

Contracts have been given for the brick for a large tobacco factory to be built at Kernersville, N. C., by Beard & Co.

The erection of large boiler works in Mobile is contemplated.

The Fairview Coal and Mining Co., Fairview, Ala., are opening new coal mines in the Coosa coal regions.

It is reported that the Broken Arrow Coal and Mining Co., of Broken Arrow, Ala., will lease their mines, to be worked on a still larger scale.

It is reported that a Northern capitalist will build a cotton factory in Claremont, Va.

The Edison Electric Light Co., of Knoxville, Tenn., previously reported as organizing, has been incorporated to introduce electric light; stock $40,000.

The Dayton Coal and Iron Co., of Dayton, Tenn., is the name of the English company previously mentioned as proposing to build two 125-ton furnaces at Dayton. The ground has been broken, and their construction will be pushed forward.

The large shops of the New Orleans & Northeast Railway, at Meridian, Miss., previously mentioned, will be finished about September. They will be supplied with best machinery.

The City Council, Corsicana, Texas, will build a $6,500 school house.

The property known as the "Old Sims Mill," in Pickens county, S. C., is being overhauled and much new machinery put in.

J. L. Murray, George's, S. C., is putting up a large saw and planing mill.

Incorporated in Newport, Ky.—the Whitcomb Steel Compound Co ; stock $500,000. Incorporators are E. E. Wood, Robert Waring and Wm. M. Shaw.

Tyson & Watson, Atlanta, Ga., have formed partnership to manufacture sash, doors, &c.; special capital $5,000

Gaston & Culbertson, Paris, Texas, have purchased ground for a cotton-seed oil mill.

The Meridian Fertilizer Factory, stock $50,000, has been organized at Meridian, Miss., with C. Berney pres dent, W. L. Goldsmith general manager, and G. W. Meyer treasurer. Will manufacture fertilizers.

E. J. Brown is building a saw and planing mill at Yates Point, near Kissimmee, Fla.

D. Perry and A. Mallory, Pensacola, Fla., are putting $3,000 worth of machinery into a steam laundry.

The project for a cotton mill in Aberdeen, Miss., previously reported, is meeting with favor, and over $40,000 was subscribed in a few hours. Proposed capital $100,0000. Committee in charge: Jacob Guttman, C. W. Gibson and C. C. Heison.

A new $10,000 building, to be called the Alabama Hall, is to be erected on the Normal School grounds at Tuskaloosa, Ala.

Talladega, Ala., is figuring on the cost of water-works.

Some prospect of a rice-cleaning mill in Elizabeth City, N. C.

B. F. Tresler, Jr., of Aurora, Ind., will build a $12,598 courthouse in Trimble county, Ky.

Charles Hammond, Greenville, S. C., will start large brickyard.

The Erlanger Syndicate has awarded the contract for 2,000,000 brick, for the building of their new railroad machine shops at Meridian, Miss., to C. W. Robinson, of Meridian. These shops will employ about 400 men when completed.

The Warren Glass Works Co., of Cumberland, Md., have shut down to rebuild their furnace, &c. Will take a month or more to complete the repairs.

The boiler at Ozias & Blackburn's sash factory, Cleveland, Tenn., exploded, but did no serious damage to machinery.

A $10,000 Methodist college will probably be built at Cleveland, Tenn.

About $10,000 has been raised for the street railroad in Rome, Ga.. which will now be built.

The Central Presbyterian Church, Atlanta, Ga., will erect a $75,000 to $100,000 church. The West End Methodist Church, in the same city, will also put up new building.

Chamberlin, Johnson & Co., Atlanta, Ga., will erect a $40,000 house.

A new court-house is to be built at Decatur, Ga., and contractors are invited to correspond with Judge F. F. Edward.

Elyton Land Co., Birmingham, Ala., will build a new street railroad.

There is talk of another foundry and machine shop being erected in Calera, Ala., soon.

The glass factory company lately organized at Morrillton, Ark., has been incorporated as the Arkansas Valley Glass Co.; capital, $25,000. Will erect factory very soon.

Denis Dean & Son have purchased land from Gress & Meyers, of Morrillton, Ark., and will erect large saw mill.

A canning factory will probably be erected in Raleigh, N. C.

The New Venice Saw Mill, at Pascagoula, Miss., is being overhauled and repaired.

Ellis & McClure are preparing plans for the large hotel to be built at Monticello, Fla.

The Tompkins Machinery and Implement Co., Dallas, Texas, capital $250,000, has been organized.

The cotton mill lately reported as being erected at Columbus, Ga., by Mr. Jas. A. Lewis, will be a small factory for dress plaid and cottonades. Will not put any spindles in for the present.

Col. Ed. Richardson, of New Orleans, is preparing to build the 60 miles of railroad reported some months ago.

Burnside Bros.' tobacco factory, at Lancaster, Ky., which they will soon build, is to be 84x150 feet.

A company has been organized in London, Eng., as the North American Land and Timber Co., capital $2,500,000, for the purpose of operating in Louisiana. They have purchased 1,500,000 acres of land, which will be drained by steam dredging, improved, &c. Engineering and mechanical part of the business is under direction of Prof. Alexander Thompson. The American office of the company is at Lake Charles, La.

BURNED.

Saw mill of R. B. Reppard, near Blackshear, Ga.; loss heavy.

Mill of Mr. Shamburgher, near Hawkins, Texas.

Plow works and machine shops of Baxter Shemwell, at Charlotte, N. C.; loss $3,500.

W. Rieppe's grist mill, Charleston, S. C.; loss about $4,000.

Barrel factory of Hurley, Grey & Co., and works of the Mobile Electric Light Co., at Mobile, Ala.; loss $60,000.

Steam saw and grist mill of Frank Owings, Fairhaven, Md.

CORRESPONDENCE relating to the manufacturing, mining, lumbering and all other material interests of the Southern States is solicited. We invite those interested in the development of the South to make free use of our columns. Reaching so many capitalists in all parts of the United States seeking profitable investment in the South, the MANUFACTURERS' RECORD offers an excellent chance for the people in that section to place the advantages of each locality before those likely to be interested. We will take great pleasure at all times in telling what has already been accomplished in the South, and showing up the opportunities of doing still more,—so if you desire to attract immigration or capital, or if you know of an opening for profitable investment in manufacturing, mining or kindred pursuits, write us an account of it It will be published free of cost.

THE MANUFACTURERS' RECORD, published in Baltimore, is doing a good work for the South. Its editors have discernment enough to see that there is a bigger boom in store for this section than has yet been forecast, and it has labored zealously in aiding to unfold its resources.—*Daily Review*, Wilmington, S. C.

THE Betts Machine Company, Wilmington, Del., have just put in the foundation for a new erecting shop. It will be 122 feet long by 75 feet wide, with the centre 25 feet high and the sides about 16 feet each. They are making it practically fireproof, being composed of iron and brick, with very little wood-work. The centre of the building will be supported on wrought-iron columns, and these columns will also support the plate girders, on which one of the Morgan Engineering Company's twenty-ton traveling cranes will run. The shop will be well lighted, and in every way suited to the erection of large tools. The traveling crane is of the latest and most improved construction, and will, of course, be driven by power. The Edge Moor Iron Company have the contract for the iron work, and will deliver it next month. Should the weather prove favorable, the building will be under roof not later than the end of June. This addition to the already extensive works of the company will give them greatly increased facilities for handling their constantly growing business.—American Machinist.

THE attention of our readers is asked to the very excellent exhibit of sales made by the Westinghouse Engine Company, as it appears in this issue of the MANUFACTURERS' RECORD. Evidently there are no dull times with the manufacturers of these engines, their sales being not only very liberal, but each month showing a marked increase over the preceding one. The Westinghouse Engine Company know that their engine is a first-class piece of machinery, for which they feel justified in making strong claims; and having faith in their engine they also have faith in advertising it, and the results of these two is the remarkable list of sales published by us to-day. If any of our readers contemplate the purchase of an engine we would advise them, before making a selection, to write to the Westinghouse Engine Company for catalogues and prices.

THE most complete compendium of information that we have seen for a long time is in the shape of a neat little volume in gold and red, recently published by Messrs. Jones & Laughlins, Pittsburgh, with the title of "Useful Information for Business Men, Mechanics and Engineers." It commences with an exposition of the relative merits of hot and cold-rolled shafting, as shown by exhaustive experiments. Then follow rules for ascertaining the transmitting efficiency and horse-power of shafting, rules for calculating the speed of pulleys, &c., notes on belting, and a vast number of tables, formulæ, rules, &c., containing an incalculable amount of information. The book was issued for gratuitous distribution among the customers of the firm; to others it will be sent on receipt of 30 cents, which just covers its cost.

MR. FREDERICK E. SEWARD, editor of the *Coal Trade Journal*, has issued his eleventh annual compendium of The Coal Trade, containing much valuable information relating to coal production, prices, transportation, &c To all interested in coal this small volume of 100 pages is almost invaluable.

LOCKWOOD, GREENE & CO.
MILL ENGINEERS
Office, 65 Westminster St., Providence, R. I.
Carefully prepared plans, specifications and estimates furnished for the construction, equipment and organization of new mills and the revision and improvement of old.

MANUFACTURING.

Subscribe to the Baltimore Manufacturers' Record. Price $3 per year.

BALTIMORE.

MR. WM. L. PETTIT, manufacturer of boilers, No. 40 York street, has quite a large amount of new and general repair work. He has had more business during the past month than for any one month during the year, and the prospects are that this increase in the volume of business will continue for quite a time.

MESSRS. WRIGHT & COLWELL, brass finishers, Lee street, have received a number of orders for firms in the city and the South. They report the Southern business as very promising. They solicit orders for boilers, and have received two to be completed at an early date.

MR. W. J. CHAPMAN, York and William streets, direct shipper of coal and Connellsville coke, has shipped three or four carloads of coke to the South, and is in receipt of large orders from the manufacturing concerns in this city. The coke for which he is agent is a very superior article, and as such is becoming very popular.

MESSRS. JAMES MURRAY & SON report a briskness in their business, which has continued so for some time. They have done a considerable amount of brick-work machinery during the past season, in addition to large orders for repair work.

MR. RICHARD SAUER, manufacturer of all kinds of show cases, store and office fixtures, corner German and Eutaw streets, has enough orders on his books to keep a large force at work, while he is steadily adding to the number of his employees. He manufactures every style and design of show cases, store, bank and office fixtures, such as wall cases, counters, desks, &c.

MESSRS. HARRIS & SHEARER, proprietors of the Liberty Brass Works, 45 S. Liberty street, have received orders from the city, and also from the extreme South, for brass work, of which some of the finest kind is turned out by this firm, polished and ready for use.

H. C. BROWN, No. 1 Uhler's alley, manufacturer of saws, reports his business as brisk. He has received three large circular saws to be gummed, which he makes a specialty.

MR. JAMES BATES, corner Pratt and President streets, is receiving orders for his well-known elevators, (hydraulic, steam and hand,) which are all favorably known, especially throughout the South, from where he has received a great many orders. Mr. Bates also makes iron castings of all descriptions, and finds business quite brisk in this branch.

MR. JOHN N. MARQUETTE, machinist, W. Falls avenue, is doing considerable repair work and some little new work. He has been very busy for the past two months.

IN GENERAL.

THE Holyoke Machine Co., of Holyoke, Mass., have sent out a handsome card, on one side of which is a cut of "The Hercules" Water Wheel. On the other side it is said that a "a good water wheel increases the value of your whole plant. Get the best at first and avoid the expense and delay of changing wheels. A good wheel will serve you well for twenty years. The best is the cheapest,—it does more work, lasts longer and costs no more for gears and setting than a common wheel. The Hercules gives the most power for its size, and the highest average percentage from full to one-half gate of any wheel ever made."

E. MATHER, agent of the Jarvis Engineering Co. for Harrisburg, Pa., is setting two tubular boilers with the Jarvis Patent Boilers Setting, at the new flour mill, Steelton, Pa.

The Derby Desks.

The business office of to-day is a vast improvement upon its predecessor of twenty years ago. Formerly it was thought that any sort of a place was good enough to transact business in Business men fitted up their houses with costly furniture and appointments, but were content to sit all day in a dingy office with a bare floor, and do their writing on a dilapidated desk that had probably come down through the ages. Now they do things differently. Men have learned to see the incongruity of sleeping in a palace and spending three-fourths of the time they are awake in a hog-pen; and through gradual stages of development the office has reached a point of elegance approaching that of the private dwelling. And not in matters of comfort or convenience only has there been improvement; there are probably greater evidences of advancement in the numerous appliances for the saving of time and labor.

OVERHUNG DESK.

Embodying both these features, the modern roll-top desk has grown to be a necessity in every well-conducted office.—Its advantages are numerous.

Business men often have to leave their desks filled with incomplete papers and memoranda, to meet imperative calls at a moment's notice, and the roll-top desk, with its spring lock, allows him to leave his papers as they are, ready for the instant resuming of work, and insuring perfect safety and privacy. Another advantage of the "roll-top" is the arrangement of the "pigeon-holes" and drawers, properly labelled, by means of which an almost automatic classification of memoranda and work is easily made.

LOW, ROUND-TOP DESK.

Most every furniture and cabinet maker makes the manufacture of roll-top desks a part of his business, but among all the many styles produced the Derby Roll-Top Desk stands pre-eminent. The Derby Desk is made by the Derby & Kilmer Desk Co., Boston, and has an established reputation as a superior article, the best material and workmanship entering into its construction, the plan of which is entirely the invention of the firm. There are no loose mouldings in the work. Everything is coped in making a firm, substantial finish, and giving a handsome appearance. All mouldings are worked on solid wood, and black walnut and cherry stock are generally used.

Some other features pertaining to the Derby desk are that the rolling top is made of selected stock, with the Derby improved roll-laying machine; a combination spring lock that fastens the entire desk; drawers, interiorly divided by movable partitions, the spaces between which can be adjusted to hold different sized blanks, papers, etc.; panels of double the ordinary thickness; many conveniences, such as two hollow pen rests, and the same number of slide tablets and secret bracket drawers, letter drop, book spaces in deep drawers, card and paper racks, etc.

Two very desirable styles of desk are shown in the cuts, the lower one being a very convenient office desk made in black walnut and cherry, with low, round top, which can be seen over while sitting before it, a decided advantage. The upper cut represents an "overhung desk," as it is called, made in black walnut, cherry, ash, oak, and plain solid mahogany, in two sizes: four feet six inches wide, and five feet wide, with book rack in deep lower drawers. The interior arrangement of these desks is seen at a glance to be particularly convenient.

The Derby desks are in great demand throughout the country, and shipments are made as far West as California, and South to the Gulf States and Mexico, agents in the larger Western cities serving as distributors over their respective sections, and numbers are sold for export trade through resident agents of foreign houses.

Other designs are square-cornered desks, secretary roll-tops, tops with adjustable pigeon-hole case, library desks and roll-top book-case desks.

The company took the medal of superiority for its desks at American Institute Fair in New York last year and the year before, and was given the highest award as manufacturers of the best roll-top desk at the Southern Exposition at Louisville last fall.

These desks are made in a great variety of styles, and are sold at reasonable prices. Manufacturers, business men, and others, contemplating the purchase of office desks will find it to their advantage to send to the Derby & Kilmer Desk Co., Boston, for their handsomely illustrated catalogue and price-list.

Cincinnati Iron Market Report.

Specially reported by ROGERS, BROWN & Co., Pig Iron Commission.

CINCINNATI, June 2, 1884.

Excepting one or two large transactions, the week's business has been very light. Sales aggregating 2,500 tons were made by a Southern coke furnace at a point further West, but scarcely anything else beyond car-load orders is reported. Most consumers of iron are running exceedingly close in pig iron stocks; and should their own business show improvement, would quickly become liberal buyers. But this improvement is not visible yet. The action of the mills in signing the scale will make the market for mill iron more active, but no advance in prices is looked for at present. We quote for cash f. o. b. cars Cincinnati:

HOT-BLAST FOUNDRY.	
Hanging Rock C. C., No. 1	$21 50@22 00
" " " " 2	19 50@21 00
Southern " " 1	19 50@20 00
Strong Coke, " 1	18 00@18 75
" " " 2	17 25@17 75
" " " 3	17 00@17 25
Soft Stone Coal, " 1	18 50@19 25
" " " 2	17 00@17 75
FORGE.	
Strong Neutral, No. 1 Mill	16 00@16 00
Cold Short, " 1 "	15 00@15 50
CAR WHEEL AND MALLEABLE.	
Hanging Rock C. B.	30 00@31 00
" " W. B.	20 00@24 00
Southern Car-Wheel Iron	24 50@26 00
Lake Superior " "	23 00@24 50
" " Malleable	24 50@25 50

Specially reported by E. L. HARPER & Co.

CINCINNATI, June 2, 1884.

The uncertainty that has prevailed and been felt as to the threatened strike at the rolling mills has been removed by the mill proprietors having signed the last year scale. Thus the interruption has been averted. Some of the mills will doubtless be obliged to close for a brief season to make annual repairs, but the prospects justify the expectation that the demand for manufactured iron will increase during the summer and absorb readily the usual production. The mills continuing will necessitate the movement of mill grades of pig iron, which will stimulate the market perceptibly. There is no change otherwise in the aspect of the market. General business is not active and prices are in sympathy with the moderate demand. We quote as current prices:

	Four Months.
FOUNDRY.	
Hanging Rock Charcoal, No. 1	$22 25@23 25
" " " " 2	21 25@22 25
Strong Neutral Coke, " 1	18 00@18 50
" " " " 2	17 00@17 50
American Scotch, " 1	18 00@18 50
GREY FORGE.	
Neutral Coke	16 25@16 75
Cold Short	16 00@16 50
CAR WHEEL AND MALLEABLE.	
Hanging Rock, strictly cold blast	26 75@27 25
" " " warm "	23 00@24 00
Lake Superior Charcoal, all grades	24 00@25 00
South. Car Wheel, strictly cold blast	26 00@26 50

Richmond Iron Market.

Specially reported by ASA SNYDER, dealer in Scotch and American Pig Irons.

RICHMOND, VA., June 2, 1884.

A review of the iron trade for the past month will not pan out as satisfactorily as many predicted. The number of orders booked is large, yet as average they are for car-load lots. Some of the Virginia furnaces have blown out, while others have greatly decreased their output, so that we may now say with safety that consumption and production are running an even race. Prices are as follows:

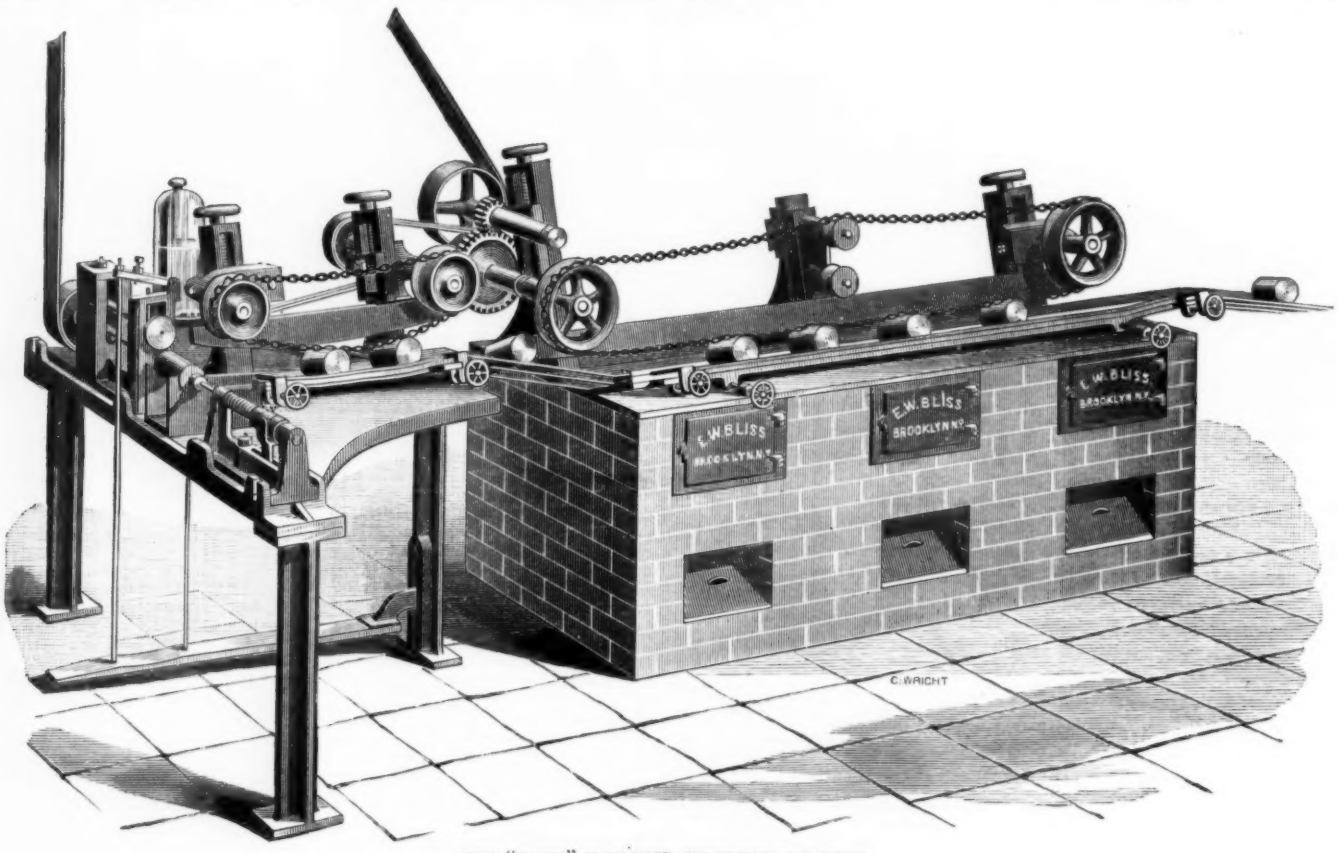
PIG IRONS.	
No. 1 Scotch Pig Iron	$23 00@25 00
No. 1 Anthracite	21 50@22 50
No. 2 Anthracite	20 00@21 00
No. 1 Virginia Coke	18 50@20 00
No. 2 Virginia Coke	17 00@18 00
No. 1 Virginia Coke Mill Iron	16 00@17 00
White and mottled	15 50@16 00
Virginia C. B. Wheel	28 00@30 00
Old rails (nominal)	—@23 00
No. 1 Wrought Scrap	18 50@19 00
No. 1 Cast Scrap	16 00@17 00
Old Dominion Nails ₩ keg	—@ 2 60
Richmond Refined Bar Iron, ₩ lb	—@ 2
Horse-Shoes, (Tredegar,) ₩ keg	—@ 4 00
Mule-Shoes, (Tredegar,) ₩ keg	—@ 5 00

Important to Can Makers.

Through the courtesy of Mr. E. W. Bliss, of 17 Adams street, Brooklyn, N. Y., the well-known manufacturer of presses, dies and special machinery for stamping and handling sheet metals, we present to our readers an illustration of a new and important machine for soldering the ends of fruit, milk, paint and other circular cans.

The "Howe" machine is in extensive, and we may say almost universal, use in the fruit and salmon packing districts on the Pacific coast, where tops of cans filled with salmon are soldered with a rapidity unparalleled, and with a less percentage of leaks than when soldered by hand process. We are assured that both ends of 50,000 cans have been successfully soldered in the "Howe" machines in a day of ten hours by two unskilled workmen, and that a great saving is effected in the use of solder and in coppers, and that the machine will do the work of fifty skilled laborers.

We may say that a machine accomplishing such wonderful results is destined to revolutionize the can-making trade.



THE "HOWE" IMPROVED SOLDERING MACHINE.

The "Howe" machine is the essential element of success in the Messrs. Norton Bros. plant of automatic machinery for manufacturing fruit cans, now in successful operation in Chicago. It is durable and easily worked, no skilled labor being required. The operator places the can between the revolving chucks of the crimper, then presses the treadle with his foot, clamping the can and bringing the crimping blade to bear, thereby fastening the ends and body together. The pressure on the treadle being removed, the can drops upon the incline, rolls under the belt of the aciding machine, which rolls it along with the lower corner of the seam immersed in the acid. The can then passes down the incline, under the belt of the soldering machine, which rolls the can along, making several revolutions with the seam immersed in the molten solder, thus insuring the penetration of the solder in the seam. The can then passes down an incline, where the solder is cooled.

Mr. Bliss is the sole manufacturer under numerous letters patent of the United States, covering the different features of the machine.

THE MARKETS.

OFFICE MANUFACTURERS' RECORD, BALTIMORE, June 4, 1884.

The stock market still continues rather weak, and investors are not disposed to put money into new enterprises until the condition of business is more satisfactory. The appointment of receivers for the Reading Railroad Company so soon after the management of the road had been taken out of the receivers' hands has had a somewhat depressing effect upon the market. On the whole, however, there is probably a rather better feeling than at the date of our last issue, the public having learned that the numerous bank failures were due more to fraudulent transactions than to any legitimate losses by hard times.

The outlook for the crops is generally regarded as very satisfactory, and should present expectations be realized there will doubtless be a marked improvement in business after harvest.

Business in manufactured iron continues limited and prices rather disposed to weakness since it has been decided that there is to be no strike. The nominal quotations are unchanged, and we repeat, viz:

Ref. Bar Iron, 1 to 6x⅜ to 1.....	₩ lb.	1.9@	2 c
" " 1 to 4½x1½ to 1..	"	1.9@	2 c
" " ⅜ to 2, round and square.....	"	1.9@	2 c
Hoop Iron, 1½ wide and upward	"	2.8@	3 c
Band Iron, from 1½ to 6 in. wide	"	2½@	2.6c
Horseshoe Iron.....	"	3.2@	3.3c
Norway Nail Rods.....	"	5 @	5½c
Black Diamond Cast Steel....	"	10 @	11 c
Machinery Steel.....	"	4½@	4¾c
Spring Steel.....	"	3½@	4 c
Common Horse Nails.....	"	10 @	11 c
Railroad Spikes, 5½x9-16.....	"	2.5@	2.6c

The demand for pig iron shows no change, sales being moderately fair, but only as needed by consumers for immediate wants. We quote, viz:

Baltimore Charcoal Wheel Iron (all Baltimore ore)..	$28 00@29 00
Virginia C. B. Charcoal Wheel Iron..	28 00@— —
Anthracite, No. 1.....	21 00@23 00
" " 2.....	20 00@21 00
" " 3.....	18 00@20 00
" Mottled and White.....	16 00@17 00

Not the least important of the objects of interest in Cincinnati is the Palace Hotel, which is an imposing structure eight stories high, fronting on three streets. All the floors are reached by elevators; the office and dining-room are lighted by electricity, and it is provided with all the modern aids to comfort and convenience. The rooms are newly papered and it is elegantly furnished throughout. ‡

Philadelphia Iron Market.

PHILADELPHIA, June 2, 1884.

The Eastern Pennsylvania iron trade is in neither better nor worse condition this week than last; demand for all kinds of iron and steel continues light for the season, and orders are all small, but the aggregate of business is fair, and no great weakness in prices is to be noted. The best brands of forge and foundry iron are selling steadily at firm prices, consumption being about equal to the output; but of the inferior makes there are abundant stocks, and the pressure of weak holders to sell has led to the naming of unprecedentedly low prices. In these irons sales have been made in limited lots at $16.50 delivered for Grey Forge, $18 for No. 2 foundry, and $19 50 for No. 1 foundry; standard and special brands remain at the usual limits of $20 to $21 for No. 1, $19 for No. 2, and $18 to $18.50 for Grey Forge. American Bessemer is under inquiry at $18 at furnace, and is gradually driving out the foreign article, for which $19.50 to $20 is asked. Spiegeleisen is quoted at $27.50 to $28 for 20%.

Manufactured iron is selling in small lots at 1.85 to 2 cts. for best refined, and from that down to 1.60, according to quality; plate, tank and structural iron are in fair demand for immediate requirements, but no large orders are being given out.—Mills are pretty sure of work for the summer; bridge works are busy, and, as usual, are favored with more business than is received by other mills. Bridge plates are quoted at 2.25, and are firm. Angles and common plate are rather weak at 2 10 to 2.20; beams and channels have sold as low as 3.40; thin sheet iron and galvanized are in good demand, and mills are busy; wrought iron pipe is quiet at steady prices.

Nails are selling at $2.45 to $2 50 in large lots, of which very few are being placed. There is a good deal of demand for small lots, for which the prices range a little higher.

There are rumors of large sales of steel rails at $31.50, but nothing definite can be learned as to this business, and the companies here are holding to $33 as their inside price for small lots. At this price but little business is being done. There are very few buyers for old rails at any price; $21 to $21 50 is quoted for foreign tees. Scrap iron of all kinds is weak and dull.

HARDWARE.

For harvest tools there is still a fair trade, and for other lines of season goods, such as cherry seeders, fruit parers, &c., the demand is active, but in general hardware business is only moderate.

The signing of the wage-scale by Pittsburgh iron manufacturers has tended to weaken nails, and while prices are nominally as before—$2.50 to $2.60—it is understood that concessions could be obtained.

The Scott Manfg. Co., of this city, are working a full force on their rotary pea grading machines, pineapple slicers, improved Hopper cherry seeders, Phillips fruit evaporators, rotary knife peach parers, and other specialties, which they are shipping to all parts of the country. In compliance with a demand from packers all over the country, they have made a "Mammoth" rotary-knife peach parer on the same principle as the family rotary-knife parer, but designed for packers and evaporators. Have large orders for them They are at work on their improved Victor apple parer, corer and slicer, which is a marvel of simplicity and perfection. The demand still continues for their Gray's shingle and sawing machines.

St. Louis Iron Market.

Specially reported by HOFFER & Co., Pig Iron and Iron Ore, No. 318 Olive Street.

ST. LOUIS, June 2, 1884.

The market remains about as last quoted. We quote:

HOT-BLAST CHARCOAL.	
Missouri..	$19 00@20 00
Southern..	20 00@22 00
Ohio..	24 00@26 00
COKE AND COAL.	
Missouri..	19 00@20 00
Southern..	18 50@19 50
Ohio..	21 00@25 00
MILL IRONS.	
Red Short..	17 00@17 50
Neutral..	16 00@17 00
CAR-WHEEL AND MALLEABLE IRON.	
Missouri..	19 00@20 00
Southern..	25 00@28 00
Ohio..	23 00@33 00

Iron, par.

Louisville Iron Market.

Specially reported by GEO. H. HULL & Co., Commission Merchants for the sale of Hot and Cold Blast Pig Iron.

LOUISVILLE, KY., June 2, 1884.

The market continues quiet and dull in price, but many of the foundries are doing a large amount of work, buying a fair share of pig iron, and sales in consequence foot up very satisfactorily. We quote for cash in round lots as below:

PIG IRON.

Southern Coke, No. 1 Foundry	$18 50@19 00
" " " 2 "	17 00@17 50
Hanging Rock Coke, No. 1 Foundry.	19 00@19 50
" " Charc'l, " "	22 00@23 50
Southern Charcoal, No. 1 Foundry ..	19 00@21 00
Silver Gray, different grades	15 50@17 50
Southern Coke, No. 1 Mill, Neutral..	16 00@16 50
" " " 2 " " ..	15 00@15 50
" " " 1 " Cold Sh't	15 25@15 75
Southern Charcoal, No. 1 Mill	16 00@18 00
White and Mottled, different grades	14 00@14 50
Southern Car Wheel, stan'd brands.	26 00@27 00
" " " other brands..	22 00@24 00
Hanging Rock Cold Blast	27 00@28 00
" " Warm "	21 00@23 00

Specially reported by W. B. BELKNAP & Co., Nails, Wire, Iron, Hardware, Carriage and Wagon Goods.

LOUISVILLE, KY., June 2, 1884.

Bars continue dull, and no sort of price seems able to infuse any briskness into the trade. Wagon makers are using material a little more freely, but railroads are scrimping in every conceivable way, and probably will do so until the July payment interest is out of the way. This is enough to create a dullness of itself. Agricultural implement manufacturers are closing up their fiscal year, preparatory to shutting down in summer. Crop reports, however, are encouraging, though the season is late, and by July we expect to see a slight turn in the tide. Rumors of local strikes about to occur have not thus far affected prices. At present writing it would seem likely that last year's scale will be signed by the manufacturers.

Nails are jobbing in moderate quantities only. There is such a liberal supply that fine profit is almost out of the question.—There is some talk of another shut down, as it is a well-known fact that mills are piling up stock. Unanimity of sentiment on any given line of policy, however, seems more difficult to secure than heretofore, and it is doubtful if a general move be organized.

Wire.—There is a good demand for most kinds of plain wire. A lull in fencing has checked somewhat the run on barbed. Prices are evenly maintained and promise to stay so.

The general state of trade is about as usual for the season. It is not an unwise arrangement that the pic-nic and cheap excursion is coincident with thin orders.

Chattanooga Iron Market.

Specially reported by S. B. LOWE.

CHATTANOOGA, TENN., June 2, 1884.

The troubles of Wall street have materially affected some lines of business here and in the district further South. A number of enterprises that were in the process of materializing have been checked, and in some cases entirely suspended. A number of furnaces are out of the market for orders, having sold ahead for several months, and foundry irons are not plenty in the Southern District. All the furnaces in this immediate section are running full. In the Birmingham District three stacks are out. Prices are ruling low, which we quote as follows:

No. 1 Foundry	$17 00	@18 00
No. 2 Foundry	16 00	@16 50
Gray Forge	14 00	@15 00
Car-Wheel Metal	22 00	@24 00
Nails, car load lots	2 30	@— —
Bar Iron	1 70	@— —
Old Rails	only nominal.	
Wrought Scrap, No. 1	14 00	@— —
" " No. 2	11 00	@— —
Spikes (Railroad)	2 35	@— —
Light Rails	2 00	@— —
Cotton Tie Clippings	nominal.	
Barbed wire—4-pt. galvanized	6	@— —

METALS.

TIN PLATES.

BLOCK TIN.

"Lamb and Flag," and "Straits."	
Large Pigs	23
Small Pigs	24
Bars	28

TINNERS' SOLDER.

No. 1 Refined	13
Market Half-and-Half	15
Strictly Half-and-Half	16

ROOFING PLATES.

IC, 14x20, Choice Charcoal Terne	5 75
IX, 14x20, " " "	7 75
IC, 20x28, " " "	12 00
IX, 20x28, " " "	16 00
IC, 20x28, Extra fine quality, charcoal roofing, genuine "old style" redipped.	15 75
IX, 20x28 " " "	19 75

TIN PLATES.

IC, 10x14, Charcoal	6 50
IX, 10x14, "	8 50
IC, 12x12, "	6 75
IX, 12x12, "	8 75
IC, 14x20, "	6 50
IX, 14x20, "	8 50
IXX, 14x20, "	10 50
IXXX, 14x20, "	12 50
IXXXX, 14x20, "	14 50
IX, 20x28, "	18 00
DC, 100, Plate "	6 25
DX, 100, " "	8 25
DXX, 100, " "	10 25
DXXX, 100, " "	12 25

COKE PLATES.

IC, 10x14, bright, "B. V." grade	5 37
IC, 14x20, "	5 37
IX, 14x20, "	7 50
IC, 10x20, Gutters	9 25

SHEET ZINC.

In casks of 600 lbs.. ₩ lb	6
In smaller quantities, ₩ lb	7

BABBITT METAL.

A 1	15
No. 1 Ordinary	9
Antimony	18
Excelsior Babbitt Metal, No. 2	10
" " " " 4	9

LEAD.

Pig	4½
Bar, (15 oz. bars)	6½
Sheet	7½
Pipe, full coils	6½

COPPER.

Tinned Sheathing, 14x48, 14, 16, 18 oz	38
" " Planish'd, 14x48, 14, 16 oz.	40
" " " Boilers 7, 8, 9..	42
Copper Pit Bottoms	30
Tinning extra	15
Brazier's Copper, 15 to 100 lb	30
" " 10 to 12 lb	32
" " 8 lb	34
" " 6 lb	36
Bolt "	30
Tinning extra	40

BRASS.

ROLL AND SHEET BRASS.

Brown & Sharpe's Gauge the Standard.

New List, Jan. 17, 1884.

Dis 10@20 %

COMMON HIGH BRASS.

Wider than and including	2 10	10 12	12 14	14 16	16 18	18 20
To No. 20, inclusive..	.21	.22	.23	.25	.27	.29
Nos 21, 22, 23 and 24..	.22	.23	.24	.26	.28	.30
Nos. 25 and 26	.22½	.23½	.24½	.27	.29	.31
Nos. 27 and 28	.23	.24	.25	.28	.30	.32

Add 9 cts. ₩ lb. for sheets cut to particular widths and lengths.
Add ½c. ₩ lb. additional on each number thinner than Nos. 28 to 38, inclusive.
Brass thinner than No. 38 is Platers' Brass.

at	55 cts.
Printers' rules	45 cts.
Printers' Sheets and Plates cut to particular sizes and lengths to No. 20, inclusive	30 cts.

Brazing, Spinning and Spring Brass, one cent more than common High Brass.
Low Brass four cts. ₩ lb. more than common High Brass.
Gilding, Oreide and Bronze seven cts. ₩ lb. more than common High Brass.

SLITTING METAL.

Add to list as follows:

Over ⅛ in. to 2 in., inclusive, Nos. 12 to 20, inclusive	½c.
Over ⅛ in. to ½ in., inclusive, Nos. 12 to 20, inclusive	1
⅛ in. and narrower, not less than	4
Over ⅛ in. to 2 in., inclusive, Nos. 21 to 28, inclusive	1
Over ⅛ in. to ½ in., inclusive, Nos. 21 to 28, inclusive	2
⅛ in. and narrower, Nos. 21 to 28, inclusive, not less than	6
Over ⅛ in. to 2 in., inclusive, Nos. 29 to 32, inclusive	1½
Over ⅛ in. to ½ in., inclusive, Nos. 29 to 32, inclusive	3
⅛ in. and narrower, Nos. 29 to 32, inclusive, not less than	12
Over ⅛ in. to 2 in., inclusive, No. 33 and thinner	3
Over ⅛ in. to ½ in., inclusive, No. 33 and thinner	6
⅛ in. and narrower, No. 33 and thinner, not less than	18
Slit Metal cut to particular lengths, ₩ lb. additional	5

PLATERS' OR GOLD METAL.

In bars	40c.
In ingots	43c.
In ingots, planed or polished	46c.

BRASS TUBING.

Brown & Sharpe's Gauge the Standard for all Tubing. Per lb.

Plain, to No. 20, inclusive	
Above 5-16 inch to 3 inches, inclusive	$ 35
Plain, to No. 20, above 3 inches	45
" 5-16 inch to No. 20	45
" ¼ inch	60
" 3-16 inch	1 00
" ⅛ inch	1 50

Bronze Tubing 3 cents per pound more than Brass.
Nos. 21, 22, 23, two cents advance on list for each number.
Nos. 24, 25, 26, four cents advance on list for each number.
Above No 26, special rates.
All Mandrel-drawn Tubes, ⅜ inch and above, five cents advance on list prices.
All Mandrel-drawn Tubes under ⅜ inch, twenty-five cents per pound advance on list prices.

Fancy Tubing to No. 20	$0 45
English, Scotch and Extra Pattern Fancy Tubing to No. 20	48

Tubing sawed or cut, 2 to 4 feet long, one cent advance on list.
Add to one cent one-half cent for each additional cutting under two feet.

WIRE IN COILS.

Old English gauge the Standard.

	Common High Brass.	Low Brass.	Gilding, Bronze and Copper.
All Nos. to No. 16, inc.	$ .22	$ .26	$ .30
Nos. 17 and 18	23	27	31
" 19 and 20	24	28	32
" 21	25	29	33
" 22	26	30	34
" 23	28	32	36
" 24	30	34	38
" 25	32	36	40
" 26	35	39	43
" 27	38	42	46
" 28	42	46	51
" 29	45	49	54
" 30	48	52	62
" 31	51	55	67
" 32	55	59	73
" 33	59	63	82
" 34	64	68	95
" 35	70	74	1.30
" 36	76	80	1.50
" 37	1.00	1.04	1.70
" 38	1.30	1.34	2.00
" 39	2.00	2.00	3.25
" 40	2.60	2.60	5.75

Spring Wire, 2 cts. ₩ lb. advance.
Whitened Wire, 3 cts. ₩ lb. advance.
Flat, Square and Half-Round Wire 4 cts. advance on Round Wire.
Fancy Wire not less than 10 cts. advance on Round Wire.
Spooling on one-pound spools 12 cts. ₩ lb. extra.
Spooling on ten-pound spools or more, 2 cts. ₩ lb. extra.

BUSINESS CHANCES.

☞ For the purpose of making the MANUFACTURERS' RECORD a still more valuable medium of communication between its readers North and South, we will publish, FREE OF CHARGE, short advertisements, not exceeding 40 words, from those in the South who have mills, factories, manufacturing sites or water-power for sale, capital wanted for industrial enterprises, &c., &c.; while readers in other sections who desire to engage in manufactures at the South are also invited to use these columns, without cost, either in seeking information regarding the advantages and special claims of different localities, or for asking about good openings for men and money. This department is also free for Southern manufacturers who wish to advertise for mill managers, superintendents, engineers, &c.

In corresponding with any of these advertisers please mention the Baltimore Manufacturers' Record.

COTTON MACHINERY, now running in first-class order, for sale on easy terms, or might take part payment in stock. A rare chance for a new mill, or others wishing to increase their machinery, to secure a bargain. Particulars furnished by A. B. Pitkin, Manufacturers' Agency, Providence, R. I.

FOR SALE.—To close an estate, two cotton factories, known as "Beaver Creek and Bluff Mills," in Fayetteville, North Carolina, at public auct on, Tuesday, July 8th. Products: yarns and sheetings. Capacity per day 7,000 yards sheetings and 40 bundles yarn. Business prosperous. Address Beaver Creek and Bluff Mills, Fayetteville, N. C.

FLOUR MILL FOR SALE.—Steam flouring mill; three run of stones. Machinery in first-class condition. Best run of custom of any mill in this section. Everything favorable to large and profitable business Satisfactory reason for selling. For particulars address Harrison & Sons, Kenton, Tenn.

A ONE SET WOOLEN MILL FOR SALE CHEAP—Located four miles south of Jonesboro, Washington county, Tenn.; runs by water, about thirty-horse power; good two-story house, 40x80 feet, and a full set of machinery; only been run two years. Also another water-power on the same stream, with buildings, &c. As much land with each water-power as parties would want. Will sell for cash or exchange for farming land. Will give some time, on part payment. For further particulars address Henry Miller & Son, Carber's Mill, Tenn.

FOR SALE—A cotton mill situated on the line of the Illinois Central Railroad, near the city of Canton, Miss., in a splendid cotton region, good water supply, cheap fuel, labor abundant. The factory would be equally well adapted to ginning on a large scale, by improved methods, and cotton-seed-oil mill combined. The property consists of 28½ acres land, lying along the railroad; factory building 100 yards from the railroad, in the centre of the tract, substantially built brick, 300x90 feet; contains one English engine, 200-horse, two English lappers, shafting and pulleys. There is a double dwelling-house on the property. Bigsby & Edmonds, Baltimore, Md.

A THOROUGHLY competent Corliss engineer of 20 years experience with engines and boilers, wants a situation in the South. Understands cotton-mill engines. Best of references as to capabilities, habits, &c. Address ENGINEER, care MANUFACTURERS' RECORD.

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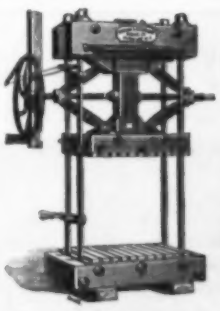

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—OR,—
—219 Fulton St., New York City.—

A GOOD INVESTMENT.—Bearing Orange Grove, twenty miles south of Jacksonville, on the St. John's River, forty-three acres, title perfect. Six hundred orange trees—three hundred bearing. House of five rooms; fine water. Crop this year fifty thousand oranges. Address Orange Grove, care of MANUFACTURERS' RECORD, Baltimore, Maryland.

A PRACTICAL cotton manufacturer of New England, with an experience of 25 years as lessee and manager, wishes to negotiate for management of a Southern cotton mill. Will buy some of the stock, if satisfactory. Can furnish letters from some of the best men in the business. Address E. B., care MANUFACTURERS' RECORD.

MAN WANTED TO RUN A PAPER MILL.—A man who has experience in paper making and a few thousand dollars can find the necessary facilities and capital for putting up and running a paper mill at Salem, Roanoke county, Va. No paper mill within 150 miles. Address W. M. Graybill, Salem, Va.

WANTED.—A partner in a furniture manufacturing enterprise, 50 miles from Atlanta, Ga. Location is in a good country, immediately on the railroad. Shop, machinery and power all new and first-class. An experienced man with some capital will find this a good opening For further particulars address FURNITURE, MANUFACTURERS' RECORD.

SOUTHERN COTTON MILL FOR SALE.—One of the best-known and best-paying mills in the South, running 8,161 spindles, will be sold, to enable division of the property among heirs. Includes 100 acres of land, and river falls, water-power of 6,000-horse power, and can be cheaply increased to 18,000 or 20,000-horse power. Sites on the property for other factories. $50,000 to $60,000 worth of new machinery put in in last four years. Mill now in very prosperous condition. A stratum of granite runs through the place, affording an almost inexhaustible supply, as good as any in the country for building purposes. Pure water. Climate healthful and salubrious. Maps, plans, specifications, inventory, and all desired information furnished on application. Address
BIGSBY & EDMONDS,
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FOR SALE.—A small cotton mill, now in operation in Calhoun county, Ala. Run by water power. Also grist mill. Fine opportunity for investment. Owner wants to sell on account of age and failing health. Address Jas. H. Savage, Ladiga, Ala.

WANTED TO KNOW.—Of good opening for a Hardware Store in the South. A place where the want of such an enterprise is felt. Would buy an established house if satisfactory. Address K F., Office MANUFACTURERS' RECORD, Baltimore, Md.

COTTON MILL FOR SALE.—A North Carolina cotton mill, with or without machinery. Well adapted and located for cotton or woolen manufacturing, hosiery, underclothing, rice milling, &c. A great bargain is offered. Satisfactory reasons for selling. Address Bigsby & Edmonds, Baltimore.

WOOLEN MILL AND WATER POWER FOR SALE.—Well located in West Virginia, buildings and machinery new, latter of most improved makes. One of the finest water powers in the State. Address G. W. M., care MANUFACTURERS' RECORD, Baltimore, Md.

PARTNER WANTED.—A practical man, to take an interest in one of the oldest and best-paying factories in the United States. Plenty of water-power, timber, &c. Big profits and ready sale for all goods made. Located in the most wholesome portion of Mississippi. Address Factory, care of MANUFACTURERS' RECORD, Baltimore, Md.

COTTON MILL FOR SALE.—Built in 1879, in the centre of cotton region; 3,000 spindles; machinery nearly new and first class. Whole can be bought at great sacrifice, or mill will be put into stock company. Full particulars upon application to Bigsby & Edmonds, 22 Second street, Baltimore.

WANTED.—Position to take charge of small foundry, or will unite with some one in the business, putting in small capital. Have had full experience. Tennessee or Georgia preferred. Address B., care MANUFACTURERS' RECORD, Baltimore.

SUPERINTENDENT OF COTTON MILL.—A gentleman of 15 years experience in cotton milling, now overseer of spinning department in a 10,000-spindle mill, wants position as superintendent of cotton mill in the South. Highest references, including present employers. Address P. M., care MANUFACTURERS' RECORD, Baltimore.

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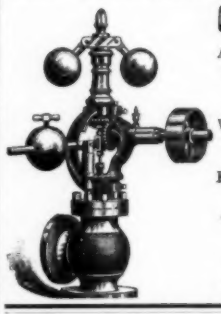

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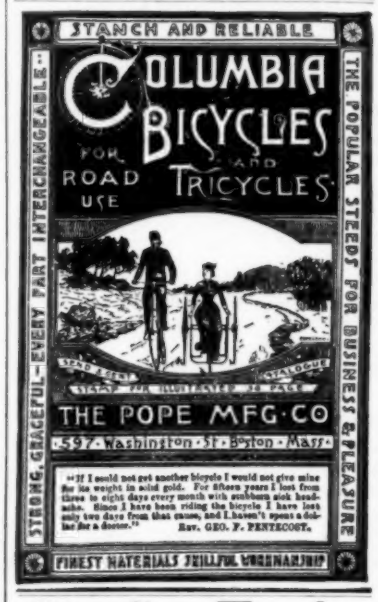

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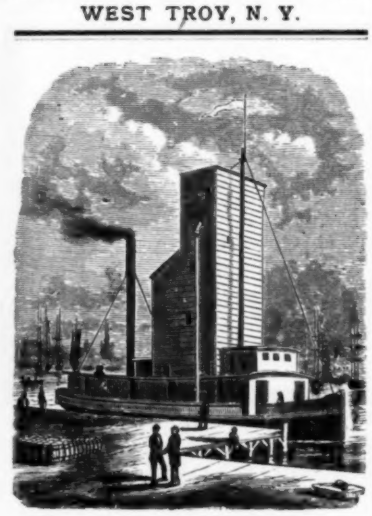

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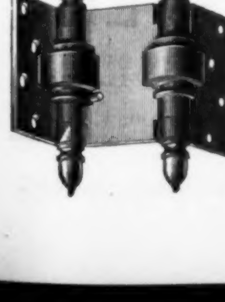

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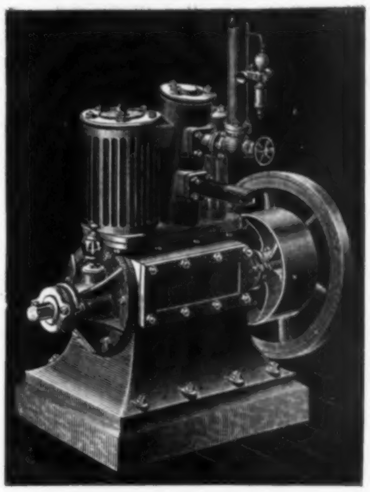

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SALES FOR FEBRUARY, 1884.

		H. P.
C. Arnold & Co. Flour Mill	Sterling, Kansas,	65
Lynn Electric Light Co	Lynn, Mass.	50
" " " " (2d order).	" "	50
" " " " (3d order).	" "	50
" " " " (4th order).	" "	0
Dallas Barrel and Woodenware Co	Dallas, Texas,	50
Benj Eastwood, Machine Shop (2d order).	Patterson, N. J.	50
Benjamin & Bower, Marine Engine	Seattle, W. T.	50
Geo. W. Moyer, Saw Mill (3d order)	Altamonte, Fla.	50
Wilkinson & Cole, Planing Mill	Mountain Creek, Ala.	30
" " " " (2d order).	" " "	30
A. Higley, Stamp Mill	Cleveland, Ohio,	40
Siddall, Carroll & Co., Planing Mill	Calvert, Texas,	40
M. L. Braswell, Saw Mill	Blythewood, S. C.,	30
R. D. Wood & Co., Machine Shop	Philadelphia, Pa.	20
Arkansaw Oil Co. Oil Mill	Texarkana, Ark.	30
M. M. Conger, Flour Mill	Mexico, Mo.	20
Pittsburgh Bessemer Steel Co	Pittsburgh, Pa.	30
Albany Oil and Refining Co. Oil Mill	Albany, Ga	30
Payne & Hammond, Cotton Ginning	Hammond, Texas,	30
C. H. Howland, Electric Light	Los Angeles, Cal.	20
Banks & Matthias, Chair Factory	Allentown, Pa.	20
Chester Huntington, Machine Shop	New York,	20
" " " " (2d order).	" "	12
Adams & Price, Machine Shop	Nashville, Tenn.	12
Burrell & Whitman, Manufacturers Tinware	Little Falls, N. Y.	12
C. B Lee, Machine Shop	Galveston, Texas,	12
R. M. McDonald, Machine Shop	Greenville, S. C.	8
Charlotte Gas Company	Charlotte, N. C.	8
J. W. Shaffer, Machine Shop	Ottawa, Kansas	8
E. B. Golet, Grist Mill	Mobile, Ala.	8
M. V. Monarch, Distillery	Owensburg, Ky.	8
Cumberland & Passumpscott Mills (2d order).	Cumberland, Me.	4
Washington Packing Co	Astoria, Oregon,	4
Lowe & Isherwood, Laundry	Austin, Texas,	4
Total, Thirty-five Engines		975

SALES FOR MARCH, 1884.

Northern New York Manufact'g Co. Talc. Mill	Governeur, N. Y.	100
Piedmont Manufacturing Co. Cotton Mill	Piedmont, S. C.	160
Utah Electric Light Co	Salt Lake City, Utah,	65
Marshalltown Electric Light Co	Marshalltown, Iowa,	65
Lombard, Ayers & Co. Oil Refinery	New York,	65
Reynoldsville Mining and Manufacturing Co	Reynoldsville, Pa.	50
Russell & Erwin Mfg. Co. Machine Shop	New Brittain, Conn.	50
Jackson Lime Co	Blount Springs, Ala.	70
Givernaud Bros. Silk Mill (4th order).	Homestead, N. J.	50
" " " " (5th order).	" "	12
Equitable Gas Company	New York,	40
" " " (2d order).	" "	40
" " " (3d order).	" "	40
" " " (4th order).	" "	40
J. W. & E. Grove, Saw Mill	Fredericksburg, Pa.	40
Spring Lake Iron Co	Fruitport, Mich.	30
Neal Bros. & Brooks, Paper Mill	Lockport, N. Y.	30
Barker & Hopkins, Planing Mill	Yarrellton, Texas,	30
Chesapeake & Ohio Elevator Co	Newport News, Va.	30
Standard Underground Cable Co	Pittsburgh, Pa.	30
C. G. Washburn & Son, Saw Mill	Shelby, N. C.	30
Austin Hydraulic Cement Co	Austin, Texas,	20
Cole & Frank, Ginning	Elm Creek, Texas,	20
Phil. & Reading Coal & Iron Co (5th order).	Reading, Pa.	20
West & Renfrew, Ginning	Blanco, Texas,	20
Brayton Petroleum Engine Co	Bridgewater, Mass.	20
Texarkana Ice Co	Hot Springs, Ark.	20
S. A. Blasangaine, Saw Mill	Clanton, Ala.	20
Oakland Paper Co	Manchester, Conn.	20
The Levett-Muller Electric Light Co	New Orleans, La.	20
Geo. O. Baker & Co. Electric Light	Selma, Ala.	20
Justice Bateman & Co. Elevators	Philadelphia, Pa.	12
W. B. Creight, Ginning	Winnsboro, S. C.	12
Walter A. Taylor, Chemist	Atlanta, Ga.	12
People's Gas Light Co	Rutland, Vermont,	12
Carrie Furnace Co. Electric Light	Rantsburgh, Pa.	12
S. C. Brooks, Electric Light	Eau Clair, Wis.	12
Okeechobee Land Co (2d order).	Kissimee, Fla.	12
May & Lackey, Ginning	Leander, Texas,	12
J. B. Gray, Ginning	Georgetown, Texas,	12
J. J. Barber, Ginning	Florence, Texas,	12
Imray, Hirsch & Kaeppel	Melbourne, Australia,	12
J. H. Robbins & Sons, Machinists	Selma, Ala.	12
A. J. Mullin, Brick Yard	" "	12
J. B. Pearce, Marine Engine	Portland, Or.	8
Amos John on, Marine Engine	" "	8
A. Hacks adt	North Topeka, Kan.	8
Ilwaco Steam Navigation Co (2d order).	Astoria, W. T.	8
Steamer "Josie Harry," Electric Light	Memphis, Tenn.	8
R. Neptune & Co	Vincennes, Ind.	8
E. D. Pearce	Portland, Or.	4
The Fort Wayne Organ Co	Fort Wayne, Ind.	4
Evans & Roberts, Boiler Shop	Birmingham, Ala.	4
Van de Poele Electric Light Co	Chicago, Ill.	4
Total, Fifty-four Engines		1,627

SALES FOR APRIL, 1884.

Gov't of New South Wales, Electric Light	Sydney, Australia,	100
Anson, Eldred & Sons, Pl g Mill, (3d order)	Ft Howard, Wis.	125
Phil. & Reading Coal and Iron Co. (6th order)	Reading, Pa.	80
John Carson, Saw Mill	New Tacoma, W. T.	80
Omaha & Grant Smelting and Refining Co	Omaha, Neb.	80
Lawrence Machine Co	Lawrence, Mass.	65
Portland Electric Light Co	Portland, Or.	65
" " " " (2d order).	" "	65
" " " " (3d order).	" "	65
Council Bluffs Electric Light Co	Council Bluffs, Ia.	65
Beloit Straw Board Co. Paper Mill	Beloit, Wis.	65
Wm. E. Pierce, Woolen Mill	Allentown, R. I.	50
A. & V. P. Brown, Drainage	Providence Plant'n, La.	50
L. Godchaux, "	Mary Plantation, "	50
O. Hymee, "	Hymelia " "	50
Foos & Barnett, "	Shadyside " "	50
McKeesport Electric Light Co	McKeesport, Pa.	50
" " " " (2d order).	" "	50
James Kirk, Flour Mill	Winfield, Kan.	50
Thompson Houston Electric Light Co	St. Louis, Mo.	50
Alex. Wilson & Co., Flour Mill	Clarke, Dak.	50
Shepard Mfg. Co. Planing Mill	Minneapolis, Minn.	50
R. Viterbo, Drainage	Edmee Plantation, La.	40
B. Johnson, "	Carroll " "	40
R. Milliken, "	Waterford " "	40
E. F. Dugas, "	Armalee " "	40
L. D. Martin, "	Marmillion " "	40
Felix Chillingworth	New Haven, Conn.	40
Palmer & Trowbridge, Hoisting	Chicago, Ill.	40
E. F. Johnson, Drainage	Roseland Plantation,	30
John A. Morris, "	Ashton Plantation, La.	30
L. D. Martin, " (2d order).	Marmillion " "	30
T. S. Wilkerson, "	Myrtle Grove, " "	30
Folse & Naquin, "	Assumption " "	30
Edmund M. Ives & Son, Drainage	New Orleans, La.	30
J. E. Thropp & Co. Ore Crusher	Edge Hill, Pa.	30
Howard Oil Co	Houston, Texas,	30
Walter Alford, Planing Mill	Bellville, Ont.	30
F. Wohlleb, Ginning	Cameron, Texas,	30
F. H. Goldthwaite & Co. Button Factory	Springfield, Mass.	30
Wells & Ferguson, Ginning	Allen, Texas,	30
Isaac Strauch, Flour Mill	Cressona, Pa.	30
F. N. Burt, Tannery	Ogdensburg, N. Y.	30
O. Hymee, Drainage (2d order).	Goldmine Plant'n, La.	20
R. C. Martin, "	Albemarle " "	20
J. W. Gullahorn & Bro. Planing Mill	Coopers, Ala.	20
Aberdeen Electric Light Co	Aberdeen, Miss.	20
Emmor Camp, Saw Mill	South Strabane, Pa.	20
M. Pierce, Spice Mill	Toronto, Ont.	20
Rayford & Nickol, Ginning	West Station, Texas,	20
Reedy & Langhouse, "	Waxahatchie, Texas,	20
Paine Lumber Co. Planing Mill	Oshkosh, Wis.	20
Okeechobee Land Co. Hoisting (2d order).	Kissimee, Fla.	12
Canning & Gill, Wagon Factory	Selma, Ala.	12
Perin Plow Works	Topeka, Kan.	12
Asa G. W. Smith	Reading, Pa.	12
C. H. Mitchell, Electric Light	Detroit, Mich.	12
McTighe Electric Light Co (5th order).	Pittsburgh, Pa.	8
Thompson Houston Elect. Lt. Co (2d order).	St. Louis, Mo.	4
H. B. Claflin & Co	New York,	4
St. Albans Gas Light Co	St. Albans, Vt.	4
Crescent Stave Manufacturing Co	New Orleans, La.	4
Total, Sixty-two Engines		2,409

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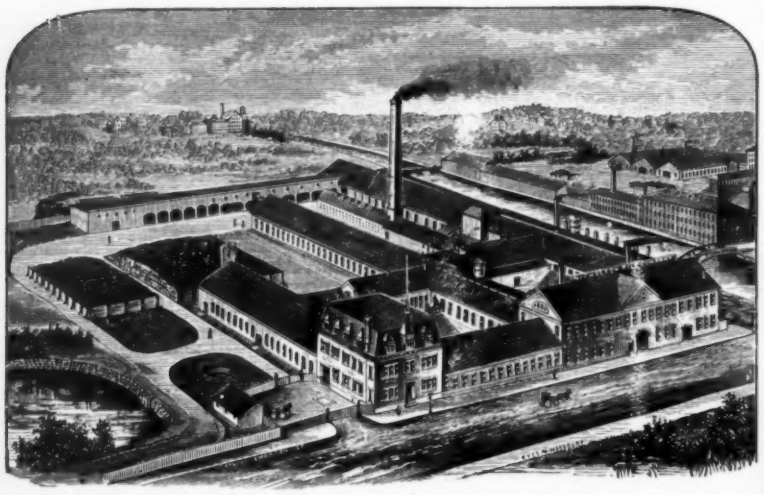

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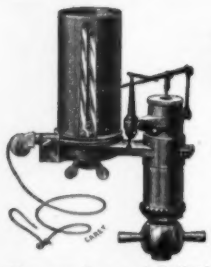

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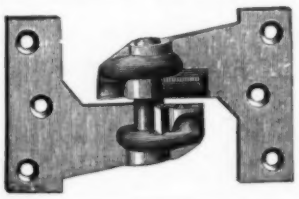

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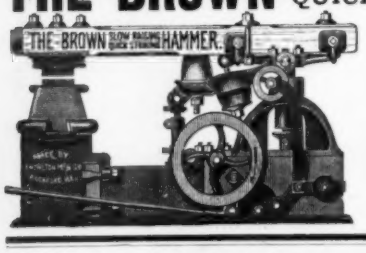

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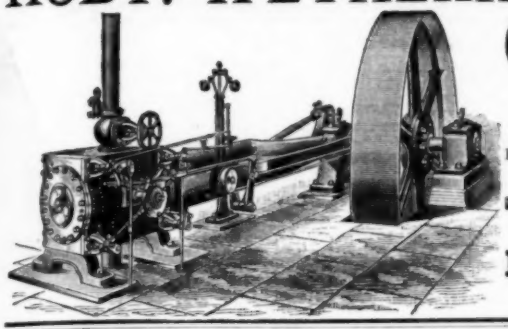

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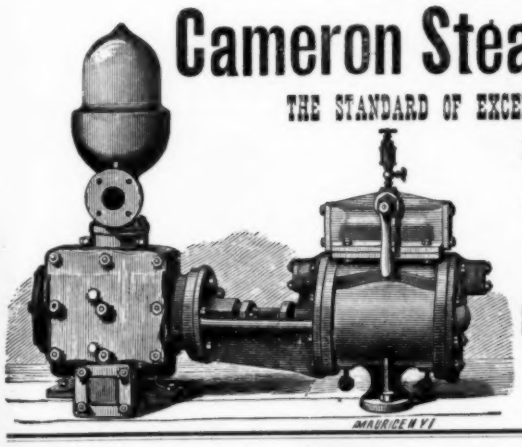

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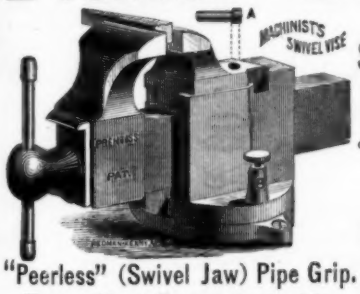

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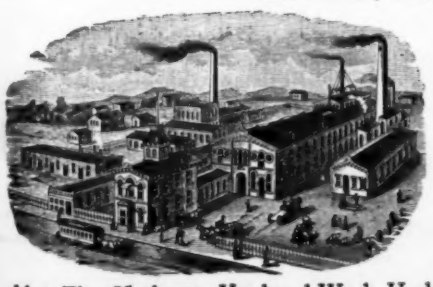

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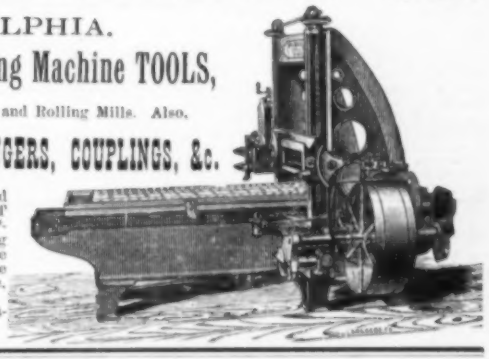

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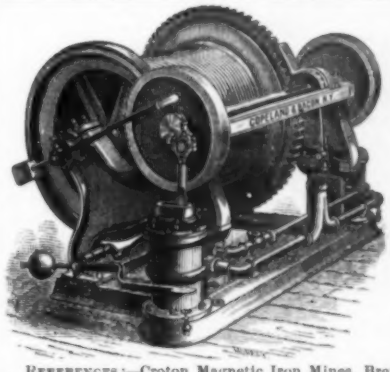

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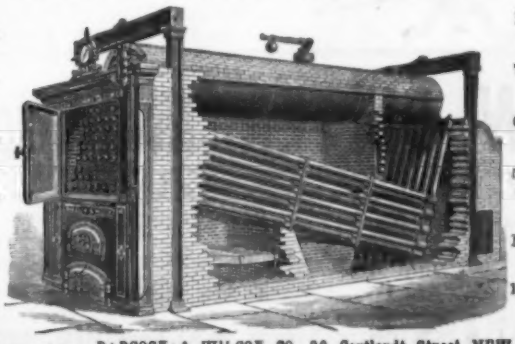

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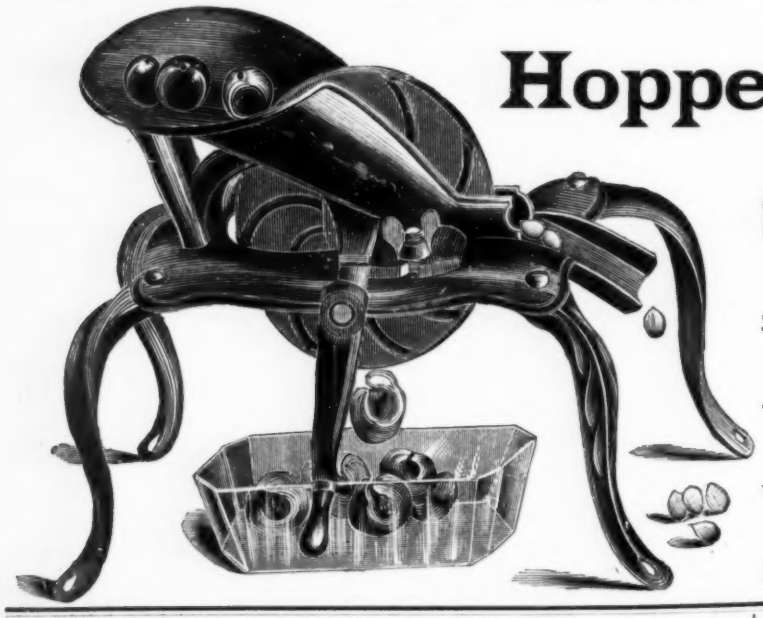

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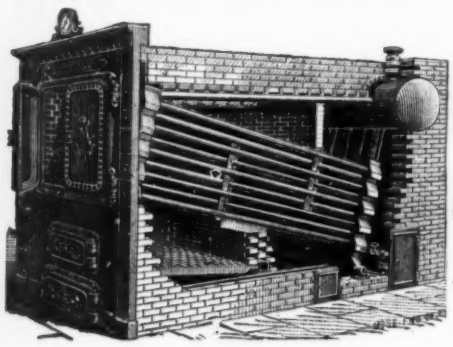

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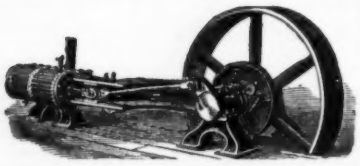
ZELL Retort FURNACES for Steam Boilers.
CONDENSERS, HEATERS, PUMPS, &c.



Office and Works, No. 42 N. HOLLIDAY STREET, BALTIMORE, MD.

STEPHENS' VISES.

FLAT and SWIVEL BASES; SOLID JAWS; STEEL FACED and SOLID STEEL BARS; ADJUSTABLE ATTACHMENTS.

For Jewelers, Machinists, Car and Locomotive Works and all other Vise Work they *maintain their superiority in strength, firmness of grip, durability and make;* while affording the *greatest economy in time and labor.* Special Vises for Amateurs and Wood-Workers. Sold by the Trade. Send for Circular.

NATHAN STEPHENS, Proprietor,
41 Dey St., NEW YORK.

S. W. RITTER, Millwright,

—BUILDER OF—

Flour and Saw Mills, Drug and Chemical Works, Portable Mills, Smut Machines, Mill Stones, Bolting Cloths, Brushes, Guano Fertilizer Mills, and General Mill Supplies,

261 S. Caroline Street, BALTIMORE, MD.

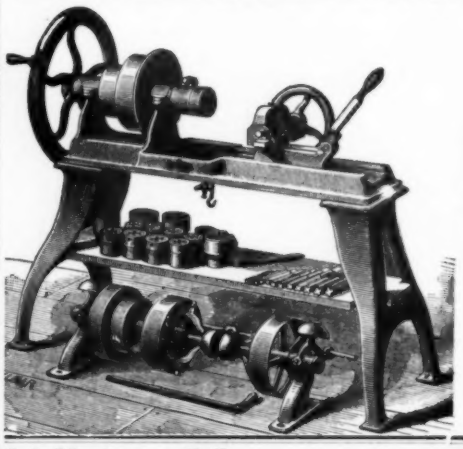
Illustrated Circulars, giving full Information, sent free on Application.

STEUBNER & WOODS,

168 and 170 East Third St.
HUNTER'S POINT,
Long Island City, N. Y.

MANUFACTURERS OF
STEEL AND IRON
* COAL TUBS *
Side and Bottom Dumping Cars, Coal and Coke Barrows,
HOISTING BLOCKS, ETC.

WILEY & RUSSELL MFG. CO., Greenfield, Mass.



BALTIMORE AGENTS:

MORTON, REED & CO.

Lightning Screw Plates, Bolt Cutters, Fine Taps and Dies, Green River Drilling Machines, Punching Presses, Tire Upsetters, Tire Benders, and other Labor-Saving TOOLS.

White Mountain Freezer Co.

MANUFACTURERS OF
SANDS' PATENT TRIPLE MOTION
White Mountain Ice-Cream Freezer.

The only Freezer ever made having three distinct motions, thereby producing finer, smoother Cream than any other Freezer on the market. Acknowledged by every one to be the best in the world. Over 300,000 in use to-day. Outside irons galvanized, but all inside the can coated with Pure Block Tin. Tubs water-proof, machinery easily adjusted and operated. We also carry large stock of Packing Tubs, Packing Cans, Ice Crushers, &c. Send for Price List and Trade Discounts.

—Address—

White Mountain Freezer Co.

102 E. HOLLIS ST., NASHUA, N. H.

HARDWARE.

Baltimore WHOLESALE Prices.

ANVILS.

Eagle and Vulcan.....₩ lb 10c, dis 20 %
Wright's.....10½c
Armitage's Mouse Hole.....9½ c
Trenton.....10½c
Wilkinson's.....10½c

AUGERS AND BITS.

Conn. Valley Mfg. Co.....
Douglass Mfg. Co..... } dis60 % from list of
Ives..... } Jan. 7, 1880.
Cook's Douglass Mfg. o.....dis 40&10 %
Griswold .....dis 50&10 %
Patent Solid Head.....dis 25 %
Russell Jennings' Auger, Dowel, Machine-Dowel and Hand Rail Bits.....dis 10&10&10 %
Ives' "Jennings'" Bits.....dis 40&10&10 %
Expans. Bits, Clark's, small, $18; large, 26..dis 25 %
Expansive Bits, Ives'.....$20@30, dis 33⅓ %
Expansive Bits, Blake's.....$20, dis 40 %
Hollow Augers, Ives..... dis 25 %
Hollow Augers, Douglass'.....dis 25 %
Hol. Aug., Bonney's Adjust., ₩ doz $48, dis 25&10 %
Hol. Aug., Stearns' Adjust., ₩ doz $48, dis 20&10 %
Hol. Aug., Ives' Expansive, each $4.50, dis 30&10 %
Hol. Aug., Universal Expansive, each $4.50, dis 20 %
Wood's.....dis 25 %
Gimlet Bits.....$7.50 ₩ gross, dis 50 %
Gimlet Bits, Diamond.....₩ doz $1.25, dis 40 %
Double Cut Gimlet Bits, Shephardson's...dis 40 %
Double Cut Gimlet Bits, Douglass'.. ...dis 33⅓ %
Double Cut Gimlet Bits, Ives'.....dis 50 %
Morse's Bit Stock Drill.....dis 25 %
L'Hommedieu's Ship Augers.....dis 15 %

AWL HAFTS.

Sewing Brass Ferrule..$3.5 ₩ gross—dis 40&10 %
Patent Sewing, Short....$10 ₩ gross—dis 40&10 %
Patent Sewing, Long.....$1.20 ₩ doz. net
Patent Peg, Plain Top...$10 ₩ gross—dis 40&10 %
Patent Peg, Leather Top.$12 ₩ gross—dis 40&10 %

AWLS, BRAD SETS, &c.

Awls, Sewing, Common.....75c. to $1
Awls, Shouldered Peg.....75c. to $1
Awls, Patent Peg.....50c to $1.50
Awls, Shouldered Brad.₩ gross $2.70 - dis 25&10 %
Awls, Handled Brad.....$7 ₩ gross - dis 25&10 %
Brad Sets, Aiken's.....₩ doz. $12—dis 45&10 %
Brad Sets, No. 42, $10.50; No. 43, $12.50....dis 70 %
Brad Sets, Stanley's Exc.' No. 1, $9.60.dis 30&10 %
Brad Sets, Stanley's Exc.' No. 2, $4.80.dis 30&10 %
Brad Sets, Stanley's Exc.' No. 3, $7.80.dis 30&10 %

AXES.

Collins & Co.....$7.25; beveled..$7.75
Cohoes Mfg. Co.....$7.25; beveled..$7.75
Lippincott or Mann's.
Single Bit, 4½ to 5½ and under...₩ doz. $7.25 net
Single Bit, 4½ to 6 and over.....₩ doz. $7.75 net
Single Bit, beveled.....50c. doz. advance
Double Bit, 4½ to 5½ and under..₩ doz $12.00 net
Double Bit, 4½ to 6 and over....₩ doz. $13.00 net
Double Bit, beveled.....$1.00 ₩ doz. advance
Second quality Axes.....50 cts. less than above

AXLES.

Sheldon & Co., iron .....55 % off
" " " steel..... 55 % off
AXLE GREASE—Frazer's.....₩ lb. 6c.

BALANCES.

Spring Balances.....dis 25&10 %

BELLS.

Hand, Light Brass.....dis 70 %
Hand, White Metal..... .....dis 60 %
Hand, Silver Chime.....dis 30&10 %
Hand, Globe (Cone's Patent).....dis 25&10 %
Gong, Abbe's .....dis 2'&10 %
Gong, Yankee.....dis 30&10 %
Gong, Barton's.....dis 30&10 %
Leon Reading.....dis 25&10&10 %
Pull, Brook's.....dis 50&10 %
Crank, Taylor's..... dis 25&10 %
Lever, Sargent's..... dis 55&10 %
Bloomfield .....dis 20 %
Lever, R. & E. M. Co.'s.....dis 45&10&2 %
Call .....dis 25 %
Cow, Common Wrought..... dis 55&10 %
Cow, Western, Sargent's List..... dis 55&10 %
Cow, Kentucky, Sargent's List ..... dis 55&10 %
Cow, Moore's or Dodges, Genuine Ky., new list:
Nos. 0 1 1½ 2 3 5 5 6 Hog } dis.60&
$12 $10 $9 $8 $7 $4 $3.50 2.50 $5 } 10 %
Cow, Texas "Star".....dis 40 %

BELLOWS.

Blacksmiths' Common.....dis 50 %
Molders' ....dis 25 %
Hand Bellows.....dis 25 %

BLIND FASTENERS.

Francis .....dis 20 %
Mackrell's.....₩ doz pairs $1.00, dis 10 %
Van Sand's Screw Pattern.....$9 ₩ gross, net
Van Sand's Old Pattern..1⅛ ,$8; 1¼, 8.50 ₩ gro, net
Merriman's.....new list, net
Zimmerman's, 10⅜ in.....₩ gross $26 00
Zimmerman's, 9 in.....₩ gross 24.00
Zimmerman's, without screws.....$5.00 less

BLIND STAPLES.

Barbed, ½ in. and larger.....₩ lb 11c net
Barbed, ⅜ in.....₩ lb 13c net

BLOCKS.

Penfield Block Co., Rope and Iron Strap'd..dis 40 %

BOLTS.

Cast Iron Barrel Shutter, &c.....dis 55&10 %
Cast Iron Chain (Sargent's list).....dis 60&10 %
Wrought Barrel.....dis 55&10 %
Wrought Square.....dis 55&10 %
Wrt. Shutter, all Iron, Stanley's list...dis 50&10 %
Wrt. Shutter, Brass Knob, Stanley's list dis 50&10 %
Wrought Shutter, Sargent's list.....dis 55&10 %
Wrought Sunk Flush, Sargent's...dis 65&10&10 %
Wrought Sunk Flush, Stanley's.....dis 40&10 %
Wrought B. K. Flush, Stanley's.....dis 50&10 %
Carriage and Tire, Common, new list.....dis 75 %
Carriage and Tire, Philadelphia Pattern dis 50 %
Carriage Bolts, Clarke's..... . ..dis 80 %
Carriage Bolts, Lancaster Bolt Co..
Excelsior, Low List.....dis 60&10&10 %
Norway.....dis 75 %
R. B. & W. Carriage (old list).....dis 65 %
Tire, American Screw Co.'s, Phila.....dis 75 %
Tire, "Bay State"..... .....dis 65%, new list
Eagle Philadelphia Tire Bolt.....80%
Stove..... ....dis 60%
Plow.....dis 50&10 %
Machine.....dis 70 %
Bolt Ends and Lag Screws.....dis 70 %

BORAX.

15c ₩ lb net.

BRACES.

Q. S. Backus.....dis 50 %
Barber's.....dis 40&5 %
Spofford's Patent..... .dis 50&5 %
Ives' Patent Braces.....dis 50 %
Common Ball (American).....dis 55 %
Amidon's.....dis 50 %

BORING MACHINES—WITHOUT AUGERS.

Sweet & Clark upright, 3,60 angular.....4.40 net
Lawrence " 3.00 " .....3.50 net
Hubbard " 3.00 " ..... 3.50 net
Phillips, with Augers..... 7.00 7.50.....net

BRACKETS.

Shelf, plain.....dis 50&10 %
Shelf, fancy.....dis 55&10 %

BRIGHT WIRE GOODS.

New list ... .dis 70&10 %

BULL RINGS.

Union Nut Co..... .....dis 55 %
Sargent's.....dis 60&10 %
Humason, Beckley & Co.'s.. ..... .dis 60&10 %

BUTTS.

Wrought Brass .....dis 75 %
Cast Brass, Fast Joint.....dis 20&10 %
Cast Brass, Loose Joint.....dis 10&10 %
Fast Joint, Narrow.....dis 45&10&10 %
Fast Joint, Broad.....dis 45&10&10 %
Loose Joint... .....dis 60&10&10 %
Loose Joint, Japanned.....dis 60&10&10 %
Loose Joint, Jap, with Acorns ...dis 60&10&10 %
Parliament Butts.....dis 60&10&10 %
Mayer's Hinges.....dis 60&10&10 %
Loose Pin, no Acorn.....dis 60&10&10 %
Loose Pin, Acorns.....dis 60&10&10 %
Loose Pin, Acorns, Japanned.....dis 60&10&10 %
Loose Pin, Acorns, Jap'd, Plated Tips..... dis 60&10&10 %

Wrought Iron.

Fast Joint, Narrow.....dis 60&10 %
Fast Joint, Lt. Narrow.....dis 60&10 %
Fast Joint, Broad.....dis 60&10 %
Loose Joint, Broad.....dis 60&10 %
Table Butts, Back Flaps, &c.....dis 60&10 %
Inside Blind, Regular.....dis 60&10 %
Inside Blind, Light.....dis 60&10 %
Loose Pin, Wrt.....dis 60&10 %
Loose Pin, Light.....dis 60&10 %
Spring Hinges—
Geer's Spring and Blank Butts.....dis 25 %
Clarke Hardware Co.'s.....dis 50&10 %
American Spring Hinge Co.'s.....dis 25 %
Gem Spring Hinges.....dis 25 %
Blind Butts, Shepard's, Nos. 50 and 60....dis 70 %
Blind Butts, Shepard's, No. 050 .....dis. 70&5 %
Blind Butts, Shepard's, No. 75 .....dis 70&10 %
Blind Butts, Lull & Porter.....dis 75 %
Blind Butts, Huffer.....dis 50 %
Blind Butts, Clark's, Nos. 1, 3, 5.....dis 70&10 %
Standard Lull & Porter.....dis 75 %

BOW PINS.

Humason, Beckley & Co.'s ..... dis 55&5 %
Sargent & Co.'s.....$19.70 and 21.40, dis 60&10 %
Hotchkiss..... .....dis 25 %

BUTCHER'S CLEAVERS.

Humason & Beckley Mfg. Co.....dis 25 %
Bradley's..... .....dis 25 %
Beatty's.....dis 25&5 %

1	2	3	4	5	6	7	8
$16.50	19.00	21.50	24.00	27.00	30.00	33.50	36.50

CAN OPENERS.

American .....₩ gross $7.50, dis 10 %
New Idea.....$15 00 gross
No. 4, French. .....₩ doz $2.25, dis 55 %
No. 5, Iron Handle.....₩ gross $7.50, dis 10 %
Sardine Scissors.....₩ doz $7.00, dis 55 %
Sprague, No. 1, $3; No. 2, 2 25; No. 3, 2 50.dis 50&10 %
Universal.....₩ doz $3.00, dis 33⅓ %

CAPS, PERCUSSION, ₩ 1,000.

U. M. C., F C. trimmed.....50c } dis 10&10 %
U. M C., F. L. ground.....70c }
U. M. C., Cen fire ground.....70c } dis 10&5 %
U. M. C., Double W. Proof .....$1.40 }
G. D. & S. B..... .....78c, dis 10 %
E. B. 1-10, Eley's.....60c
Musket, in 1-10's.....55c
Hicks Ground Edge in Brass Boxes.....55c

CARTRIDGES.

Rim .... dis 50@10 %
Central Fire, pistol size .... dis 33⅓ %
" " Military..... .dis 25 %
B. B. Caps, Round Balls..... 1.75
" Swaged Conical..... 1 90

NEW LIST ON CARTRIDGES.

Rim-fire. 22, short.....$ 5 long.....$ 6 00
" 32, " ..... 10 " 15 50
" 38, " ..... 18 " 18 00
" 41, " ..... 15 " 17 50
Central Fire—32, $11.00; 38, $13.50; 41, 15.00;44, $19.

CARDS.

Horse and Curry, new list, July, 1881 ..dis 10 %
Cotton, new list, July, 1881..... ...dis 10 %
Wool, new list, July, 1881..... ... dis 10 %

CARPET STRETCHERS.

Cast Steel, Polished.....₩ doz $5 00, dis 30 %
Cast Iron, Steel Points.....₩ doz $2 00, dis 50 %
Bullard's... .....dis 25 %

CASTERS.

Bed..... .....dis 47½&10 %
Plate and Shallow Socket.....dis 47½&10 %
Deep Socket.....dis 25&10 %
Martin's Patent (Phœnix)..... .....dis 25 %

CATTLE LEADERS.

Humason, Beckley & Co.'s.....dis 60&10 %
Sargent's..... .....dis 60&10 %
P. S. & W .....dis 25&10 %

CHAIN.

German Halter and coil Chain.....dis 50&10 %
Trace, Breast and Fancy.....dis 45&5 %
Oneida Halter Chain (old list). .....dis 45&5 %
Galvanized Pump Chain..... .....₩ lb 8c net
Jack Chain, Iron.....dis 60&10 %
Jack Chain, Brass.....dis 50&10 %

CHALK.

White.....₩ gross 60c net
Red.....₩ gross 85c net
Blue.....₩ gross $1.00 net
White Crayons..... .....₩ gross 9c net

COTTON LINES.

Cotton Fish Lines.....dis 33⅓ %
Cotton Chalk Lines, 20 feet:

Nos. 11.	13.	15,	17,	20,	"
$3.20,	3.60,	4.00,	4.50,	5.25.	"

CHISELS.

Socket Framing, Crossman..... dis 65&5 %
Socket Framing, P. S. & W .....dis 70&10 %
Socket Framing, Douglass'.....dis 70&10 %
Socket Firmers, Crossman..... dis 65&5 %
Socket Firmers, Ohio Tool Co..... dis 60&10 %
Socket Firmers, Douglass'.....dis 70&10 %
Socket Corner... .....dis 70&10 %
Tanged Firmers..... dis 40&45 %
Tanged Firmers, Butcher's.....$5.00@$5.25 to £
I. Merrill's Socket and Framing Chisel....65&10 %

CLAMPS.

Iron, Screw, Eagle..... .....dis 50 %
Iron, Adjustable, Stearns'..... . dis 20&10 %
Iron, Cabinet, Sargent's..... ..... dis 65&10 %
Iron, Carriage makers', Carr & Crawley..dis 25 %

CLIPS, AXLE.

Norway or Best.....dis 60&5 %
Superior.....dis 45&5 %
Conestogo.....dis. 60&10
Coal Hods—Griffiths'.....dis 40 %

COCKS, BRASS.

Racking, new list, July 10, 1880.....dis 50&10 %
Globe, new list, July 10, 1880.....dis 50&10 %
Plain Bibbs, new list, July 10, 1880....dis 50&10 %
Ale and Beer, new list, July 10, 1880...dis 50&10 %

COFFEE MILLS.

Parkers'.....dis 45 %
Wilson's.....dis 50 %
Logan & Strobridge ....dis 45 %
Enterprise Mfg. Co.....dis 25 %

COMPASSES, DIVIDERS, &c.

Compasses.....dis 55 %
Calipers.....dis 55 %
Dividers.....dis 55 %
Cook's Pencil.....dis 10 %

COOPERS' TOOLS.

Bradley's.....dis 15@20 %
Barton's.....dis 20%

CROW BARS.

Cast Steel ....₩ lb 6 c
Iron, Steel Points..... ....₩ lb 4 c

CURLING IRONS, &c.

⅛, ¼, ⅜ in., $1.80, 2.00, 2.40.....dis 10 %
Curling Tongs.....₩ doz $3.65, dis 10 %
Pinching Irons.....₩ doz $7 50, dis 30 %

CURRY COMBS.

Fitch's new list.....dis 50 %
Hotchkiss, Novelty, new list, July, 1880..dis 25 %
Hotchkiss, Exclr. Supr. Champion.....dis 25 %
Lawrence "Perfect".....dis 25&10 %
Rubber..... .....₩ doz $10.00, dis 25 %
Sweet & Clarke..... .....dis 50 %
Lusters..... .....25 %

CURTAIN PINS.

Silvered Glass.....net
White Enamel.....net

CUTLERY.

Association (Table).....net
Naugatuck Cutlery Co.....list net
Excelsior Knife Co.....net
Wilson's Butcher and Shoe Knives. .....dis 30 %
Ames' Shoe Knives.....dis 15 %
Wm. Rogers Manf. Co., Plated Cutlery.....Net

DOG COLLARS.

Embossed Gilt.....dis 20 %
Leather. .....dis 25 %
Brass..... .....dis 25 %

DOOR SPRINGS.

Torrey's Rod, regular size, ₩ doz., $3..dis 40&10 %
Gem (Coil):
No. 1, Large Japanned.....₩ doz $4.00 }
No. 2, Medium Japanned..₩ doz 2.75 } dis 40 %
No. 3, Small, Japanned....₩ doz 2.00 }
No. 4, ("Shoo Fly") Screen door size, 1.50
No. 5, Screen door size.....2.00 } dis 50 %
No. 6, Medium.....2.75
No. 7, Large.....4.00
Standard—10 doz $1.25; 9 doz $1 75 ...dis 50&10 %
8 doz 2.50; 6 doz $3.50....dis 50&10 %
Hercules.. .....dis 5 &10 %

DRAWING KNIVES.

Ohio Tool Co. .....dis 60&10 %
Crossman's No. 1.....dis 65&5 %
Nobles Mfg. Co.....dis 15 %
Bradley's .....dis 35 %
Adjustable Handle.....dis 20 %
P. S. & W.....dis 70&10 %
Douglass..... .....dis 70&10 %

DRILLS AND DRILL STOCKS.

Blacksmiths'.....each, $2.50, dis 10 %
Blacksmiths' Self-Feeding....each, $7 50, dis 20 %
Breast, P. S. & W.....dis 20&10 %
Breast, Wilson's.....dis 20 %
Breast, Millers Falls.....each, $3.00, dis 25 %
Breast, Bartholomew's.....each, $3.50, dis 25&10 %
Wilson's Drill Stocks.....dis 10 %
Automatic Boring Tools.....each, $2.25, dis 20 %

EGG BEATERS.

Dover.....₩ doz. $2.50, dis 2 %
Medallion.....gross, $10.00
Victoria.....gross, $10.00

EMERY AND EMERY PAPER.

Regular numbers.....₩ lb 6c
Flour and F. F.....₩ lb 4c
B. & A. Emery Paper.....dis 30&5 %

ENAMELED AND TINNED WARE.

Kettles.....dis 60&10 %
Sauce Pans.....dis 40 %
Tinned Sauce Pans..... .....dis 40 %
Escutcheon Pins—Brass.....dis 50 %

E CUTCHEONS.

Door Lock.....Same discounts as Door Locks
Brass Thread.....dis 25 %
Wood.....dis 25 %

FAUCETS.

Fenn's.....dis 40 %
Fenn's Cork Stops.....dis 33⅓ %
Star .....dis 55&10 %
Frary's Patent Petroleum.....dis 20&10 %
West's Patent Key.....dis 45 %
Anchor Lock.....dis 45 %
Metallic Key, Leather Lined.....dis 60 %
Cork Lined.....dis 70 %
J Sommer's Best Metallic Key.....dis 40 %
J. Sommer's Cork Lined, 1st quality.....dis 50 %

FILES.

E. M. Boynton's.....new list, dis 25 %
Western File Co..... .....dis 45 %
Butcher's..... .....$4.50 to £
Moss & Gamble.....$4.50 to £
H. Disston & Sons new list.....dis 40 %
Heller Bros.' Horse Rasps.....dis 30&10 %
Nicholson.....dis 40&10 %
New American..... .dis 40 %
Union File Co.....dis 45 %
Stubs, new list.....$7.50 to £, 25 % off

FLUTING MACHINES.

Knox, 4½-inch Rolls.....$3.50 each } ....dis 35 %
Knox, 6-inch Rolls.....$4.00 each }
Knox, 8-inch.....$6.50
Eagle, 3½-inch Roll.....$2.15, dis 35 %
Eagle, 5½-inch Roll.....2.85, dis 35 %
Crown, 4½-in., $3.50; 6, $4.00; 8, $6.50 each...dis35 %
Crown Jewel.....6-in., $3.40 each....dis 35 %
American, 5-in., $3; 6-in., $3.40; 7-in., $4.50 each.....dis 35 %
Domestic Fluter.....$1.50 each, net
Geneva Hand Fluter, White Metal, ₩ doz $12.....dis 25 %
Crown Hand Fluter, Nos. 1, $15; 2, $12.50; 3, $10.50; 4, $8.25 ₩ doz..... dis 35 %
Combined Fluter and Sad Iron.₩ doz $15.00.dis 30 %

FORKS.

Lawson & Brenizer.....dis 50&10 %
Remington.....dis 50&10 %
Sheble & Fisher.....dis 50&10 %

FRY PANS.

Burnished list as follows..... .dis 60&10&10 %
No 0 1 2 3 4 5 6 7 8
₩ doz..$3.00 3.75 4.25 4.70 5.25 6.00 7.00 8.00 9.00

GAUGES.

Marking, Stanley's.....dis 50&10 %
Marking, Chapin's... .....dis 55&10 %
Wire.....dis 10&10 %
Wire, Disston's..... .....dis 20 %
Wire, Wheeler, Madden & Co.....dis 10 %

GIMLETS.

Nail and Spike.....dis 40 %
" Eureka " Gimlets.....dis 50 %
" Diamond " Gimlets.....dis 50 %
Double Cut, Shepardson's.....dis 50 %
Double Cut, Hartwell's..... .....dis 50 %
Double Cut, Ives'.....dis 50 %
Double Cut, Douglass'.....dis 33⅓ %
" Reel " ....₩ gro. $12.00, dis 25 %

GLUE POTS.

Tinned and Enameled.....dis 35 %
Family, Howe's " Eureka ".....dis 25 %
Family, L. F. & C.'s " Handy ".....dis 30 %

GRINDSTONE FIXTURES.

Sargents Patent.....dis 70&10 %
Reading Hardware Co.....dis 25&10 %

GUN WADS.

Eley's B. E. wads, 11 upwards $1.75
" " " 9 and 10..... 2.00
" " " 7 " 8..... 2.25
" P. E. " 11 upwards..... 2.90
" " " 9 and 10..... 3.65
" " " 7 " 8..... 4.45

HAMMERS.

Maydole's.....dis 15 %
Magnetic Tack, Nos. 1, 2, 3, $1.26, 1.50 and 1.75..... dis 25&10 %
Warner & Noble's.....dis 5 %
Kip's or Selsor's.....dis 30 %
Yerkes & Plumb.....dis 15 %

HANDLES.—Door or Thumb Latches.

Nos..... 0 1 2 3 4
Per doz..$0.80 1.00 1.18 1.35 1.100.....dis 55&10 %
Roggin's Latches.....₩ doz 35c. @ 40c. net
Bronze Iron Drop Latches.....₩ doz $0.90@1.10
Jap'd Store Door Handles—Nuts, $1.25; Plate, $2.00, no Plate, $1.10.....dis 10 %
Barn Door .....₩ doz $1.00, dis 10 %
Wrought Chest.....dis 65&10 %
Surface Chest.....dis 55& 0 %
Flush Chest.....dis 55&10 %
Lifting .....dis 50&10 %
Saw and Plane..... .....dis 40&10 %
Lippincott Cross-Cut Saw.....35c per pair
Hammer and Hatchet..... .....dis 30 %
Brad Awl.....₩ gross, $3.00, dis 20&10 %
Chisel, all kinds..... .....50&10 %
Auger, assorted, ₩ gross.....$4.50
Auger, large, ₩ gross..... 5.00
Patent Auger, Ives'.....dis 25 %
Patent Auger, Douglass'.....₩ set $1.25 net
Patent Auger, Swan's.....₩ set 1.00 net

HAMMOCK CHAIRS.

White Mountain, per doz.....$36.00
" " Finished in red, per doz..$42.00

HANGERS.

Barn Door, old patterns..... .....dis 60&10 %
Barn Door, New England.....dis 60&10 %
Climax (Anti-Friction).....dis 50 %
Warner's.....dis 30 %
Richard's.....dis 30 %

HATCHETS.

Shingling, Nos. 1 2 3.....₩ doz $7.25 $8.00 $8.75
Claw, Nos. 1 2 3.....₩ doz 7.75 8.50 9.25
Lathing, Nos. 1 2 3.....₩ doz 7.50 8.00 8.50
Hammond's, new list.....dis 45 %
Blood's.....dis 35 %
Hunt's.....dis 30 %
Russel's, low list..... .....dis 40 %
Cohoes Bench Broad Adzes..... .....40 %

HAY KNIVES.

"Lightning".....₩ doz. $30.00 net 5 %
Wadsworth's..... .....dis 30 %

HINGES

Plate Hinges { 8,10&12 in..... 5½c. ₩ lb.
"Providence" } over 12 in..... 4½c. ₩ lb.
Screw Hook { 8, 10, 12 in..... 4 c. ₩ lb.
and Strap. { 14 to 36 in..... 3 c. ₩ lb.
Crown spring hinges, for screen doors, dis. 60 %; for solid doors, single action, dis. 45 %; for solid doors, double action, dis. 55 %.
Crown Screen Door Latch....₩ gross $12, dis 55 %
Crown Christmas-Tree Holders, 2-inch, ₩ doz. $9; 3-inch, $12.....dis 45 %
Bickford Portable Pump .....each $6, dis 2 %
American Cake Mixer, No. 6...each $3.50, dis 30 %
American Tobacco Cutter.....₩ doz. $15, dis 30 %
A. M. Co. Clothes Wringer, No. 2 rolls, 10x1¾, ₩ doz., $37.50; No. 2¼ rolls, 12x1¾, $48..... .....dis 30 %
Heavy Welded Hook { 8@12 in. $7.50 ₩ 100 lb. } dis
14 in. & up, $6 ₩ 100 lb. } 20 %
Screw Hook and Eye... { ⅛ & 1 in.....9c. } dis
⅛ in.....9c. } 20 %
⅜ in.....10c.
½ in..... 12c.
Wrought Strap & T list, Dec. 20, '77, dis 60&10 &10 %

HOES.

Planters.....60&5 %
Riveted Shank.....₩ doz. $5.00, dis 50&10 %
Socket.....₩ doz. $5.25, dis 50&10 %
Grub.....dis 50 %
Hick's Pat. Solid C. S. Planters'.....dis 60&10 %
Hick's Pat. Solid L. S. Scovill Pattern..dis 60&5 %
Hubbard, Bakewell & Co.....dis 50&10 %

HORSE NAILS.

Ausable: Nos. 5 6 7 8 9 10
Plain, ₩ lb....30c 27c 25c 24c 23c 22c.dis 20&10 %
Finish'd ₩ B..31c 28c 26c 25c 24c 23c.dis 2 &10 %
Clint'n, P'n, " .. . 23c 21c 20c 19c 18c dis 20&10 %
Clint'n, Fin'd " ... 24c 22c 21c 20c 19c.dis 20&10 %
Essex, ₩ lb.....31c 28c 26c 25c 24c 23c.....dis 30 %
Putnam " .....27c 24c 22c 21c 20c 19c..dis 5&10 %
Saranac " ... .30c 28c 21c 20c 19c 18c.....dis 30 %
Globe, " .....26c 23c 21c 20c 19c 18c .dis 10&5 %
N'thw'n " .....28c 25c 23c 21c 21c 20c.dis 10&10 %
Ch'mpl'in Forged ₩ lb....30c 27c 25c 24c 23c 22c.dis 25&10 %
A. C., ₩ lb....28 25 23 22 21 21 .dis 10, 10& 5 %
C. B. { .....28c 25c 23c 22c 21c 21c.dis 10& 5 %
K. {
Bridgewater....24c 21c 19c 18c 17c 16c.dis 25& 5 %
New Haven.....33c 30c 28c 27c 26c 22c.dis 30&10 %
Capewell.. .....31c 26c 25c 25c 24c 23c.dis 20&10 %

HORSE SHOES.

Burden.....₩ keg $3 87½
R. I. Horse Shoe Co., Perkins' Improved, Light, Medium and Heavy.₩ keg $3.87½
Mule Shoes.....₩ keg $4.87½
Walker's—Forged: (Light, Medium and Heavy.) Horse.....₩ keg $3.87½
Mule.....₩ keg $4.87½
Keystone Solid Calk Steel Horse.....$5.87½ 5 %
" " " Mule.....$4.87½ 5 %

HORSE POKES.

Excelsior.....$8 ₩ doz.
Akron.....$3 ₩ doz.
OX SHOES—Mt. Carmel Ox Shoes.....10 cts. ₩ lb.

ICE CREAM FREEZERS.

Peerless—3 quart, $4.50; 4 quart, $5.50; 6 quart, $7; 8 quart, $9; 10 quart, $12. The Gooch Patent "Giant"—14 quart, $20; 18 quart, $25; 21 quart, $30; 25 quart, $35; 32 quart, $40; 42 quart, $45. Discount 50%.
American—2 quart, $2.75; 3 quart, $3.25; 4 quart, $3.75; 6 quart, $5 each.....dis 45 %
Crown, single action, 2 quart, $3.75; 3 quart, $4.50; 4 quart, $5.50; 6 quart, $7; 8 quart, $9; 10 quart, $11; 14 quart, $14; dis 45 %
Crown, double action, with crank, 8 quart, $10.50; 10 quart, $13; 14 quart, $16.50; 18 quart, $21; 24 quart, $25. With fly wheel, 8 quart, $13; 10 quart, $16; 14 quart, $20; 18 quart, $25; 24 quart, $30; 32 quart, $37 50..... .....dis 45 %
Star, double action, 2 quart, $3.75; 3 quart, $4.50; 4 quart, $5.50; 6 quart $7; 8 quart, $9; 10 quart, $11; 14 quart, $14.... .....dis 45 %
Gem, double action, 2 quart, $3.75; 3 quart $4.50; 4 quart, $5.50; 6 quart, $7; 8 quart, $9; 10 quart, $11; 14 quart, $14..dis 55 %
Crown Ice Chipper.....₩ doz. $7.50, dis 35 %

IRONS.

Carriage (Jap'd 80c ₩ gross).....dis 60&10
Base—Common.....dis 30&10 %
Hemacite Door Knobs.....new list, dis 35&5 %
Door Mineral... }
Door Por. Jap'd.. } Same discounts as Door Locks
Door Por. Plated. }
Door Por.....
Furniture Plain.....75c gross inch, dis 10 %
Furniture, Wood Screws.....dis 30 %
Picture.....dis 50&10
Hemacite. Picture.....dis 35 %
Shutter, Porcelain.....dis 50&10

LADLES.

Melting & Skim'ng, Monroe's Pat.₩ doz $4 dis 40 %
Melting, C & C..... ....dis 30&10 %

LAWN MOWERS.

Buckeye, Easy and Excelsior, new list...dis 30 %
LINES—Linen Fish..... .....dis 25&10 %
Wire Clothes, Galvanized, 100 feet....₩ doz. $3.00

LOCKS AND LATCHES.

Cabinet, Eagle..... } Changes made in list price
Cabinet, Gaylord.... } of some numbers Jan. 1,
Cabinet, Bridgeport. } 1881, dis 25&2 %
Cabinet, P. & F. Corbin.....dis 40 %
Trunk, new list, Jan 1, 1881.....dis 15&2 %
Yale Lock Co., Flat Key.....dis 40 %
Plate.....dis 33⅓ &2 %

DOOR LOCKS, ETC.

Branford..... }
Norwalk..... }
Norwich..... } List prices as revised
P. & F. Corbin..... } Dec. 6th, 60&2 %
Russell & Erwin..... } for cash.
Mallory, Wheeler & Co.. }
Padlocks—Russell & Erwin..... }
Mallory, Wheeler & Co ..... } dis 45 %
Norwich Lock Manf. Co..... } and 2% for cash
Wm. Wilcox & Co..... }
Wm. Wilcox & Co.'s Plate Locks.....dis 33⅓
Yale Lock Manf. Co.'s "Standard".....dis 40 %
Romer's.....dis 25@40 %
Conestoga.....dis 75 %
Scandinavian, "Norwich".....dis 50&10 %

MALLETS.

Penfield Block Co., Apple, Hickory and Lignumvitæ.....dis 30 %

MEAT CUTTERS.

Dixon's (P. S. & W.) Nos. 1 2 3 4.
₹ doz $14 $17 $19 $30-dis 35 %
Perry's, Nos. 1 2 3 4 4 gr'd 5 gr'd
Each. ....$3 4 5 11 13 36 dis
Woodruff's (P. S. & W.).....Nos. 100 150
₹ doz. $15 18-dis 35 %
Bales'.....Nos. 11 12 13
₹ doz..$27 35 45-dis 50&10&2 %
Kieser's No. 55.....$40 ₹ doz. dis 40 %
Kieser's Gem..... $25 ₹ doz. dis 40 %
Kieser's No. 82.....$40 ₹ doz. dis 40 %
Kieser's Monarch.....$45 ₹ doz. dis 40 %
Beef Shaver, (Enterprise Manf. Co).....dis 25 %

MOLASSES GATES.

Stebbins Patterns.....dis 70&10 %
Stebbins Genuine.....dis 67½ &10 %
Stebbins Tinned Ends.....dis 40&10 %
Chase's Hard Metal.....dis 50&10 %
Self-Measuring, (Enterprise).....dis 20 %
Lincoln's Pattern.....dis 60&10 %
Weed's.....dis 15 %
Boss Nos. 1 2 3 4
$7 8 9 10..₹ doz
Boss, Japanned Finish.....dis 60&10&10 %
Boss, Bronze Finish.....dis 50&10&10 %

NUTS AND WASHERS.

Square Nuts.....8 c off list
Hexagon Nuts.....8½ c off list
Washers.....7½ c off list

OILERS.

Zinc and Tin.....dis 60&10 %
Brass and Copper.....dis 50 %
Malleable (Hammer's)..... ₹ doz $5, dis 10 %
PINKING IRONS.....₹ doz 75c, net

PLAITING MACHINES.

Astor Plaiting Machine..... each $15, dis 20 %
Crown Plaiting Machines.....dis 25 %
6 in., $6; 10 in. $8 each.

PLANES AND PLANE IRONS.

Bench, First Quality.....dis 20 %
Bench, Second Quality.....dis 25 %
Molding.....dis 15 %
Bailey's (Stanley R. & L. Co.) new list, Jan. 1879.....dis 20&10 %
The Stanley (S. R. & L. Co.) new list, January 1879.....dis 20&10 %
Bailey's.....dis 20&10 %
Plane Irons, Butcher's.....$5.50 to £
Plane Irons, Auburn Tool Co.....dis 20 %
Plane Iron, Ohio Tool Co.....dis 20 %
Plane Irons, Sandusky Tool Co.....cis 20 %

PLIERS AND NIPPERS.

Button's Patent.....dis 33⅓ %
Hall's Pat. Compound Lever Cutting Nippers, No. 2, 5 in. $13.50; No. 4, 7 in., $21 ₹ doz.dis 25 %
Gas Pliers.....dis 50 %

PLUMBS AND LEVELS.

Disston's.....dis 40 %
Stanley R. & L. Co.'s Pat. Adjustable..dis 65&10 %
Stanley R. & L. Co.'s Non-Adjustabl...dis 65&10 %
Chapin's Patent Adjustable.....dis 65&10 %
Chapin's Non-Adjustable.....dis 65&10 %
Standard Rule Co.'s New Adjustable..dis 65&10 %
Standard Rule Co.'s Non-Adjustable...dis 65&10 %
Pocket Levels.....dis 65&10 %

RAIL.

Sliding Door, Wrought Brass...₹ lb. 43c. dis 30 %
Sliding Door, Bronzed Wrt. Iron ₹ ft. 12c. dis 35 %
Sliding Door, Iron, Painted..₹ ft. 4c. dis 10&10 %
Barn Door....inch.....½ ¾ ⅞
Per 100 feet..$2.60 3.60 5.60-dis 10 %
B. D. for N. E. Hangers—
Small Med. Large.
Per 100 feet.....$2.10 2.70 .30—net

RIVETS.

Iron and Tinned, new list, Dec. 10, 1881,..dis 40 %
In bulk, new list, Dec. 10, 1881..... .....dis 40 %
Copper Rivets and Burrs..... .....dis 45 %
Nos.. 7 8 9 10 11 12 13 14 15
₹ lb..49c. 50c. 52c. 54c. 56c. 58c. 60c. 65c. 70c.

RIVET SETS.....dis 40 %

RODS.

Stair, Brass.....dis 25 %
Stair, Black Walnut .....60c. ₹ doz.—nett

HULLS.

Boxwood. Ivory.
Chapin's..... } dis 70&10 % } dis 40&10 %
Standard..... }
Stanley..... }
Stevens & Co.....70 & 10%. Ivory.....50%
Stevens & Co. Miscellaneous.....50 & 10%

SAD IRONS.

Self-Heating, Charcoal.....₹ doz. $9.00 net
Mrs. Pott's Irons.....dis 35 %
Enterprise Star Irons, new list, July 20, '82.dis 35 %
Comb'd Fluter and Sad Iron.₹ doz. $15.00, dis 15 %
Common Sad Irons.....2¾ c. ₹ lb.

SAND PAPER.

Baeder & Adamson's Flint, 00@1½ $4.50₹ r'm. }
Baeder & Adamson's Flint, 2, 2½ &3, 5.00₹ r'm. }
Beader & Adamson's Flint, Assort'd 4.75 ₹ r'm. } dis 35 %
Beader & Adamson's Star..... 3.75₹ r'm. }
Beader & Adamson's Emery ₹ r'm $6.50@11.50 }
J. Bartle's Sand, Flint and Emery Paper...30&5 %

SASH CORD.

Common.....₹ lb. 14c. net
Patent.....₹ lb. 17c.@18c. net
Silver Braided Lake Hemp.....₹ lb. 50c. dis 10 %
Silver Braid. Lake White Cotton.₹ lb. 50c. dis 10 %
Silver Braided Lake Drab Cotton.₹ lb. 55c. dis 10 %
Silver Lake Cable Laid, Bengall unbleached Hemp, 17 cts.....dis 10 %
Russian Hemp, 19 cts.....dis 10 %
Italian Hemp, 34 cts .....dis 10 %

SASH WEIGHTS.

Solid Eyes, in 500-lb. lots and over.₹ lb. 1¼ c. net

SAUSAGE STUFFERS OR FILLERS.

Miles.....₹ doz. $20, dis 25&5 %
Perry.....₹ doz., No. 15; No. 0, $21,... dis 35 %
Enterprise Mfg Co.....dis 25 %
Monarch.....dis 40 %

SAWS.

Boynton's Lightning Cross Cuts, new list.dis 40 %
Boynton's Circular and Mill.....dis 40 %
Boynton's Ice.....dis 25 %
Boynton's Lightning Hand, Panel and Rip.dis 25 %
Disston's Circular.....dis 40 %
Disston's Mill.....dis 40 %
Disston's Cross Cut.....dis 40 %
Disston's Hand, Panel, Rip, &c.....dis 20 %
Hubbard, Bakewell & Co. Cir. Saws...dis 40&5 %
Hubbard, Bakewell & Co. Cross Cut.....30c. ft.
Hubbard, Bakewell & Co., One-Man's, X Cut, dis 40&5 %
Hubbard, Bakewell & Co., Mill Saws..dis 40&5 %
Peace Circular and Mill.....dis 40 %
Peace Hand, Panel and Rip.....dis 25 %
Peace Cross Cuts.....dis 35 %
Peace Band Saws, all widths .....dis 10 %
Webster Cross Cut, with Handles.dis 35&10&10 %
Griffin's Hack Saws and Blades .....30 %

SAW FRAMES.

White.....₹ doz $1.05, dis 10 %
Saw Rods.....$10 list, dis 10&10 %

SAW SETS.

Stillman's Genuine, ₹ doz. $3.50 and $5.50, dis 10 %
Stillman's Imitation.....₹ doz. $3.25, dis 30&10 %
Common Lever.....₹ doz. $2.00, dis 30&10 %
Leach's.....No. 0, $8.00; No. 1 $15; dis 15 %
Hammer, Hotchkiss.....$5.50, dis 10 %
Aiken's Genuine.....$13.00, dis 50&10 %
Aiken's Imitation.....$7.00, dis 50 %
Disston's.....dis 20 %
Morrill's.....No. 1, $15; No. 5, $52, dis 35&10 %

SCALES.

Hatch, Counter, No. 171..₹ doz. $42, dis 37½ &10 %
Hatch, Tea, No. 161....₹ doz. $15.00, dis 37½ &10 %
Union Platform, Keystone.....$6, dis 45 %
Chicago Scale Co.....Special dis
Fairbanks'.....dis 20 %
Forsyth Scale Co.....dis 45 %
Howe's.....dis 20&10 %
Chatillon's Grocers'.....dis 40 %
Chatillon's Eureka.....dis 25 %
Family Universal .....dis 50 %
Family Favorite.....dis 30 %
Family Turnbull's.....dis 30 %
Scale Beams, List of Jan. 12, 1882.....dis 50 %

SCRAPERS.

Adjust. Box Scraper(S.R.&L.Co.)$6.50,dis 20&10 %
Box, 1 Handle.....₹ doz. $4, dis 10 %
Box, 2 Handle.....₹ doz. $6, dis 10 %
Foot .....dis 45&10 %
Ship, common.....₹ doz. $3, net
Wilson Mfg Co .....dis 10 %

SCREW DRIVERS.

Douglas Mfg Co.....dis 20&10 %
Disston's.....dis 40 %
Cowles Mfg Co.....dis 50&10&10 %
Stanley Rule & Level Co.'s Var. Hdls.dis 50&10 %
Stanley Rule & Level Co.'s Bl'k Hdls.dis 40&10 %
Ratchet.....dis 33⅓ %
Clark's Patent.....dis 25 %
Shepardson.....25 %

SCREWS.

Flat H'd Iron, list Dec.27,'82.....dis 70 %
Round Head Iron.....dis 50 %
Flat Head Brass..... .....dis 60 %
Round Head Brass..... .....dis 15 %
Flat Head Blued add 2½ % to net of invoice.
Brass and Silver Capped.....dis 40 %
Japanned, list of Plain Screws..... ...dis 20 %
Coach, Patent Gimlet Point.....60&10 %
Coach, Common or Lag.....60&10&10 %
Bed.....dis 10 %
Machine, Flat Head, Iron.....dis 55 %
Machine, Round Head, Iron.....dis 50 %
Bench, Iron.....dis 50&10 %
Bench, Wood, Beech.....₹ doz. $3.00, dis 10 %
Bench, Wood, Hickory.....dis 20&10 %
Hand, Wood.....dis 20&10 %
Hand Rail, Sargent's.....dis 60&10 %
Hand Rail, Humason, Beckley & Co.'s.dis 40&10 %
Hand Rail, Am. Screw Co., list Jan.1,'81....dis 70 %
Jack (Wilson's).....dis 25 %

SCREEN FRAMES AND FIXTURES.

Standard Window Screens No. 1, ₹ doz. $4; 2, $5
" Door " No. 5, $15; dis 40&10 %
" Window Corner Irons, No. 3, doz. s'ts, $2
" Door " " No. 6, " " $3
dis 40&10 %
" Door Latches, ₹ dozen, $3.60; dis 50 %
Porter's Patent Window and Door Screen Frames:

PER DOZ. SETS.

	In White.	Im. Bl'k Walnut.	
No. 20	$2.75	$3.25	dis. 33⅓ %
No. 21	3.25	4.00	
No. 22	5.50	6.75	
No. 23	6.00	7.50	
No. 30	9.00	11.00	

Porter's Corners—
No. 0. Corners and Sticks complete for a three-foot window, ₹ doz. sets.....$4
No. 1. Set for Window, ₹ doz. sets, Bronzed, $2.40; Nickel, $5.62
No. 1¼. " " ₹ doz. sets, Bronzed, $3.25; Nickel, $7.50
No. 4. " " ₹ doz. sets, Bronzed, $4.00; Nickel, $8.00
No. ¼. " " or Door, ₹ doz. sets, Bronzed, $1.20; Nickel, $3.00
No. 4¼. " " or Door, ₹ doz. sets, Bronzed, $2.00; Nickel, $4.00
No. 2¼. " Door, ₹ doz. sets, Bronzed, $6.75; Nickel, $15.00
No. 3. " " ₹ doz. sets, Bronzed, $12.00; Nickel, $24.00
} dis. 33⅓ %

SHEARS AND SCISSORS.

American (Cast) Iron.....dis 70&10 %
Pruning.....see Pruning Hooks and Shears
Barnard's Lamp Trimmers.....₹ doz. $4.00
Tinners'.....dis 15 %
Conn Shears.....dis 80 %
Norfolk Shear Co..... .....dis 75 %
Jersey Shears.....80 %
J. Wiss & Son, Nickle, 50&5%; Japanned, 60&5 %

SHEAVES.

Sliding Door, M. W. & Co., list .....dis 45&2 %
Sliding Door, R. & E. list.....dis 60&10&2 %
Sliding Door, Patent Roller.....dis 60&10&2 %
Sliding Door, Pt. Roller, Hatfield's.dis 60&10&2 %
Sliding Door, Russell's Anti-Frict'n.dis 60&10&2 %
Also see Hangers.

SHOVELS AND SPADES.

Ames, New List, July 1, 1881 .....dis 15 %
Griffiths.....dis 50&5 %
Remington's (Lowman's Patent).....dis 30 %
Rowland's.....dis 60 %
Kimball's.....35 %
Lippincott, new list.....20 %
Hussy, Bins & Co.....15 %

SPOKE TRIMMERS.

Bonney's..... .....₹ doz. $10, dis 40&5 %
Stearns'.....₹ doz. $9, dis 20&10 %
Ives'... .No. 1, $15; No. 2, $12 ₹ doz., dis 55&10 %
Douglass'.....₹ doz., $9, dis 15 %

SILVER-PLATED WARE.

Wm. Rogers Manf. Co.....dis 50, 5&5 %
Holmes, Booth & Hayden.....dis 40&10&5 %
Brown Bros.....dis 40&10&5 %
Wallace's Steel Silver Plated.....33⅓ &10 %
Rogers Bros 1847 .....50 %
C. Rogers & Bro.....40, 10&5 %

SILVER PLATED HOLLOW WARE.

Wm. Rogers Manf. Co.....dis 40, 15&5 %
Meriden Britannia Co.....33⅓ %

SPOONS.

Britannia.....dis 60&10 %
Tinned, Iron, Table and Tea.....65 %
Tinned Iron Basting.....65 %
German Silver..... .....dis 40 %

STONE.

Hindostan No. 1, 5c.; Axe, 8c.....net
Sand Stone.....₹ lb. 6c., dis 33⅓ &10 %
Washita Stone.....No. 1, ₹ lb., 16c. net
Washita Stone, Slips.....No. 1, ₹ lb. 45c. net.
Arkansas.....$1.50 ₹ lb. net

SQUARES.

Steel.....dis 50 %; full cases, dis 50&10 % } 30 % cash.
Iron.....dis 50 %; full cases, dis 50&10 % }
Nickel Plated.....add $2.50@4 ₹ doz., net. }
Try Square and T Bevels.....dis 50&10 %
Disston's Try Square and T Bevels.....dis 40 %

VISES.

Solid Box—Wilson's.....dis 50 %
" Trenton..... .....dis 45 %
" Iron City Tool Works.....dis 50 %
Bench—Wilson's.....dis 45 %
" Trenton..... ....dis 25 %
" Parker's.....dis 20 %
" Prentiss.... .....dis 25 %
" Bonney's.....dis 35 %
Well Wheels..... ..... dis 60&10&10 %

WIRE.

Brass and Copper, list of Jan. 17, 1884.....15%
Bright and Annealed.....Nos. 0@18, dis 50 &10%
Bright and Annealed.....Nos. 19@26, dis 60 &10%
Bright and Annealed.....Nos. 27@36, dis 70%
Coppered.....Nos. 0@18, dis 50 %
Galvanized, Nos. 0 to 18 .....market list dis 40 %
Tinned, Nos. 0 to 18..... .....dis 60 %
Tinned Broom Wire, Nos. 18 to 25.....dis 60 %
Annealed Fence, Nos. 8&9..... .....dis 55 %
Annealed Grape, Nos. 10 to 14.....dis 50@10 %
Fence Staples, Galvanized.....₹ lb 7@7¼ c
Japanned Barb Fence.....₹ lb 6 c
Galvanized Barbed Fence..... ... .₹ lb 6¾ c
Buck Thorn Galvanized.....6¾ c
Picture Wire..... .....dis 40 %
Clothes Line Wire, Galvanized .....$3.00 ₹ doz
Wire Cloth, green, drab and black..₹ sq ft 2 c net

WRENCHES.

American Adjustable.....dis 45 %
Baxter's Adjustable "S," list Jan., 1880..dis 20&5 %
Baxter's Diagonal..... .....dis 20&5 %
Coes' Genuine..... .....dis 60 %
Coes' "Mechanics".....dis 60&10 %
Coes' Pattern, Malleable ....dis 75 %
Coes' Pattern, Wrought.....dis 60@10 %
Girard Standard.....dis 50&10 %
Girard Agl.....dis 60&10 %
Always Ready..... $9.00—25 %

WRINGERS. Per doz.

Universal, XX. No. 2½..... .. 36.00
Universal, XX. No. 2..... 42 00
Universal, XX. No. 1½..... 51.00
Universal, XX. No 1..... 66.00
Universal, XX. No. 8.... .....each 10.75
Universal, XX. No. 12..... .....each 20.25
Universal, XX. No. 18..... .....each 22 75
Universal, XX. No. 22..... .....each 30.25
Peerless, no Cogs, No. 1..... ..... 42.00
Peerless, with Cogs, No. 2½..... 45.00
Peerless, with Cogs, No. 2..... 48.00

THERMOMETERS.

Tin Case..... ..... .dis 75&10 %
Storm Glasses.....$3.25 ₹ doz.

TOE CALKS.

Winsted.....₹ lb 9c, dis 5 %

TRAPS.

Game, Newhouse..... .....dis 35 %
Game, Oneida Pattern.....dis 60&10 %
Game, Blake's Patent..... .....dis 40&10 %
Mouse, Wood, Choker..... ...₹ doz holes, 16c
Mouse, Round Wire..... .....₹ doz $1.50, dis 10 %
Mouse Cage, Wire..... .....₹ doz $2.50, dis 10 %
Mouse, Catch-em-alive.....₹ doz $2.50, dis 10 %
Cyclon Mouse.....₹ doz 75 cts.
Ideal Mouse. ....₹ doz $1.00
Rat, "Decoy".....₹ doz $10.00, dis 10 %
Delusion Mouse, per doz.....$1.50

TACKS, BRADS, &C.
New List, Sept. 1, 1882.

Tinned Swedes Tacks.....dis 30 %
Tinned American Tacks.....dis 30 %
Swedes Tacks, all kinds..... .....dis 30 %
American Cut Tacks .....dis 30 %
Copper Tacks and Nails .....dis 30 %
Hungarian Nails.....dis 35 %
Gimp and Lace Tacks.....dis 30 %
Gimp and Lace Tacks, Tinned .. ..dis 30 %
Finishing Nails. .....dis 25 %
Trunk and Clout Nails. .....dis 25 %
Common and Patent Brads.....dis 20 %
Basket Nails.....dis 20 %
Brush Tacks.....dis 20 %
Leathered Carpet Tacks.....dis 20 %
Cigar Box Nails.....dis 20 %
Chair Nails.....dis 20 %
Double-pointed Tacks.....dis 40& 5%
} Extra 10 % on all for cash.

TAP BORERS.

Common and Ring.....dis 20 %
Ives' Tap Borers.... .....dis 15&10 %
Enterprise Mfg. Co..... .....dis 25 %

TOBACCO CUTTERS.

Enterprise Mfg. Co. (Champion).....dis 25 %
Wood Bottom.....₹ doz $12.00, dis 40&5 %
All Iron..... .....₹ doz $9.50, dis 40&5 %
Wilson's.....dis 35 %

TROWELS.

Lothrops' Brick and Plastering.....dis 25 %
Reed's Brick and Plastering..... dis 15 %
Disston's Brick and Plastering.....dis 20 %
Clement & Maynard's.....dis 20 %
Worrall's Brick .....dis 20 %
Brades & Walby's.....dis 20 %
Garden.... .....dis 55 %

TRUCKS (WAREHOUSE, &C).

Handy Truck.....$2 50 net
Penfield Block Co.' list, 1882.....dis 35 %
Peerless, with Cogs, No. 3..... 54.00
Peerless, with Cogs, No. 4..... ..... 66.00
Eureka, No. 2... . ...₹ doz 42.00

MISCELLANEOUS.

"Diamond" Vegetable Grater....$5.00 ₹ doz., 10%
Rotary Knife Potato Parer.....$18.00 ₹ doz., net
Metallic Shingles ....$5.50 and $6.50 per square.
Hopper Cherry Seeders.....$5.00 ₹ doz net

PAINTS, OILS, &c.

PAINTS.

Black Lamp, coach painters.....₹ lb 20c
Black Lamp, ordinary..... .....₹ lb 6c
Black Ivory Drop, fair.....12@15c
Black Ivory Drop, best..... ...23c
Black Paint, in oil.....kegs, 6c; asst'd cans, 9c
Blue Prussian, fair to best..... .....40@55c
Blue Prussian, fair to best, in oil.....45@55c
Blue Chinese, dry.....70c
Blue Ultramarine.....15@25c
Brown, Spanish.....1c
Brown, Van Dyke. .....5@15c
Green, chrome.....8@15c
Green, chrome, in oil.....9@12@15c
Green, Paris .....good, 20c; best, 25c
Green, Paris, in oil. .....good, 20c; best, 25c
Iron Paint, bright red.....₹ lb 2¼ c
Iron Paint, brown.....₹ lb 1¼ c
Iron Paint, purple.....₹ lb 3c
Iron Paint, ground in oil, bright red....₹ lb 5½ c
Iron Paint, ground in oil, red.....₹ lb 5c
Iron Paint, ground in oil, brown.....₹ lb 4½ c
Iron Paint, ground in oil, purple.....₹ lb 6c
Linseed Oil, raw 58c
Single Boiled.....60c
Double " 62c
Mineral Paints.....2@4c
Orange Mineral 10c
Red Lead, American.....6¼@7c
Red Venetian, (Eng.) dry.....$1.50 to $1.75
Red Venetian, in oil.....asst'd cans, 9c; kegs, 6c
Red Indian, dry .....9@12c
Rose Pink.....10@13c
Sienna, American, raw.....4c
Sienna, burnt..... .. ..4½ c
Sienna, burnt, in oil.....8@15c
Sienna, raw .....8@15c
Umber, burnt.....4@8c
Umber, burnt, in oil. .....8@15c
Umber, raw..... .....3½@7½ c
Umber, raw, in oil.....8@15c
Vermillion, Chinese..... . ...90c
Vermillion, English .....50@55c
Vermillion, American, common.....15c
White Lead, American, pure dry..... 6@6½ c
White Lead, American, pure in oil..... 6@6½ c
White, Paris, English, prime.....in brls. 1½ @2c
Yellow Ochre, French.....$1 75
Yellow Ochre, F'ch, in oil, asst'd cns, 9c; kegs, 6c
Yellow Ochre, American.....in bbls., 1½ @1½ c
Yellow Chrome.....8@18c

FISHERMEN!

Twine AND Netting

MANUFACTURED BY THE

BALTIMORE TWINE AND NET CO.

W. J. HOOPER & SON,

No. 6 S. Calvert St., BALTIMORE, MD.

☞ Send for price list, naming county and State. Please mention this paper.

THE WM. ROGERS' MFG. CO.

Silver-Plated * Table * Ware.

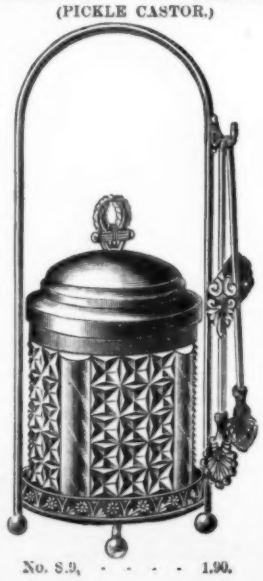
(PICKLE CASTOR.)

We manufacture a complete line of **Silver-Plated Table Ware** of all descriptions, and should be pleased to send our Price-List or Catalogue to any reliable dealer.

☞ We guarantee every piece of our Ware to be just as represented.

Our guarantee card accompanies each box of goods.

Our prices are as low as any FIRST-CLASS GOODS, and our goods are equal to any made in the country.



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AND
1865 Wm. Rogers Mfg. Co.
P. O. ADDRESS, DRAWER 30,
HARTFORD, CONN.

Non-Mechanical, No-Chimney

LAMPS!

The McLewee Patent.

Burns WITHOUT a Chimney.

NO MACHINERY TO GET OUT OF ORDER.

Absolutely Odorless and Non-Explosive!

Give a larger and brighter flame than can be obtained with a chimney. The combustion is perfect, and they are therefore free from the slightest odor. The globes having large openings at both top and bottom are never broken by the heat. Are superior to all mechanical lamps, in that they require no winding up and have no complicated machinery to get out of order. They are made with both *Single* and *Duplex* Burners.

We have had the light given by the Duplex measured by the U. S. Government Lighthouse Department, and it *gives 50 per cent. more light than either the Mechanical or Student Lamps.*

☞It is unquestionably the Best and Safest Lamp ever made.

PRICES:

Stand Lamp, (Nickel Plated,) Single Burner, Complete, - - - - - - - $4.
Duplex, made in two sizes, - - $5 and $6.
Hanging Lamps from - - - - $3 to $12.

—Discounts to the Trade.—

HEKTOGRAPH * MANUFACTURING * CO.

22 and 24 Church t., New York,

Send for Illustrated Circulars. Sole Manufacturers.

THE HERRINGTON

PATENT

IMPROVED

POTATO DIGGER!

The above Cut represents the HERRINGTON MACHINE FOR DIGGING POTATOES. It will dig where there are heavy vines, and does good work in all kinds of soil, leaving the potatoes on top of the ground, without cutting or bruising, and in good shape for picking up. If it does not perform the work, as above stated, successfully and satisfactorily, no patronage is asked for it. It will tell its own story in a potato-field with a span of horses before it.

It was awarded a diploma from the Western New York Agricultural Society at Rochester, N. Y., September 30th, 1881, for a *successful* machine for digging potatoes; also First Premium at the Fairs of both Rensselaer and Saratoga Counties, N. Y., and "Certificates of Highest Merit" at New York State Fairs of 1882 and 1883.

The following is a description of the machine and its workings:

The frame or enclosure which contains the machinery for operating the digger is hung on the axle of the machine. At the rear end of said enclosure the digger proper is hung at its top centre to a shaft which projects from the enclosure, which has a rapid, short, oscillating motion when in operation, which is driven by a crank, and a sliding-box up near the handle of the machine, which is also enclosed. The vine and weed kickers are driven with a chain belt, as can be seen.

The operator holds the handle of the machine in one hand, the reins in the other.

As the machine hangs flexible the digger can be elevated or lowered at will. When the end of a row of potatoes is reached, the operator hoists the digger out of soil, and at the same time the vine straighteners under the poles are hoisted and held by a spring and ratchet, so that the operator has nothing to do but attend to his team until he gets into position for the next row; then he pulls the cord on top of the handle, which lets the digger and vine straighteners down ready for operation, thus digging every row in succession.

Orders for these machines will be filled in time for the potato harvest of 1884.

PRICE $125.00, for all Orders received before July 1, 1884. FREE ON BOARD CARS IN TROY.

For Further Particulars and Testimonials from Parties who have Machines in Use, Address

PLANTERS' HOE COMPANY, TROY, N. Y.

Amberg's "PEERLESS" Cabinet Letter File

The small cut shows one of the Files or Drawers of a Cabinet. The index in each File has 25 divisions, giving as many spaces or compartments for separating the papers, thereby assuring quick access to any letter when wanted.

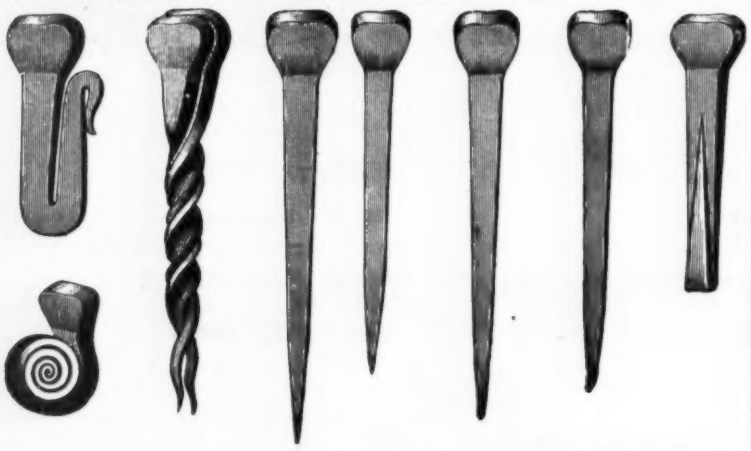
OVER 6,000 IN USE.

These Cabinet Letter Files are made in many sizes, ranging from the smallest of six Files to those of one hundred or more. As *lately improved*, they combine all the desirable points wanted in a complete Letter File; are elegantly and substantially made, the wood-work being of the best seasoned Black Walnut, veneered, with fittings of brass and steel, nickel-plated. They can be arranged for any class of correspondence, and adapted to any requirement.

Illustrated Catalogue on application to

CAMERON, AMBERG, & CO., Sole Manufacturers,

69 Duane Street, New York. 71 & 73 Lake Street, Chicago. 27 Little Britain, London.



Saranac Horse Nail Co.

PLATTSBURGH, N. Y.

A. WILLIAMS, Prest. and Treas. S. F. VILAS, Vice-Prest. W. S. GUIBORD, Sec'y.

☞ The cuts illustrating this advertisement are of Nails twisted and bent when cold.

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SLIGO IRON STORE CO., - - - - - - ST. LOUIS.
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——BUILDERS OF——

Stationary and Marine Boilers, Stills, Tanks, Agitators, Kettles, &c., Stationary and Marine Engines, Fertilizing Mills, Steam Dredges, &c.

Prompt attention given to Steamship, Mill and other Repairs. Iron and Brass Castings made to order.

SCALES,

Anvils, Vises, Portable Forges, Blacksmith's Tools, Hardware Specialties.

Send for Price-List.

Chicago Scale Co., CHICAGO.

Established 1867.

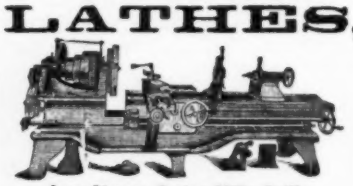
E. HARRINGTON, SON & CO.

WORKS AND OFFICE,

Cor. N. 15th St. and Penna. Ave., Philadelphia, Pa.

Manufacturers of Patent Extension

LATHES,



Iron Planers, Boring Mills, Drills,

and a variety of other MACHINISTS' TOOLS.

Patent Double Chain Screw Pulley Blocks, unrivaled for durability, safety and power.

Patent Double Chain Quick-Lift Hoists, with Brake for quick and easy lowering.

REPRESENTED BY

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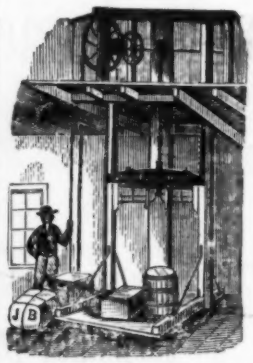
C. E. KIMBALL, 191 High Street, Boston, Mass.
W. H. RICKEY, 116 Main St., Cincinnati, Ohio.

☞ Circulars furnished.



Bates' Hand Elevators.

Patented April 18, 1871. Reissued July 25, 1876.

OVER 6,000 IN USE.

Adapted for Warehouses, Stores, Factories, Hotels, Public Institutions, and every place where merchandise, etc., is transferred from one story to another.

JAMES BATES, Patentee.

Nos. 1, 3 & 5 President Street, BALTIMORE.

THE BRADSTREET

MERCANTILE ✠ AGENCY

HAS NOW BEEN

Under its present successful management for the past seven years,

And during that time its business has more than trebled, while its facilities have proportionately increased.

No expense is considered too great in obtaining and applying to the conduct of the business all possible improvements. With its present system for obtaining and promulgating information, this Agency is justly regarded by its patrons as authority on all matters affecting commercial credit. Its ramifications are greater and its business larger than any similar organization in the world conducted in one interest and under one management.

You are respectfully invited to investigate, and, if in need of an Agency, to test its ability to serve you.

CHAS. F. CLARK, President.

Baltimore Office,—American Building,

H. KERSHAW, Supt.

New and Second-Hand Machinery

NEW.

1 Engine Lathe, 10 in. x 3½ ft.
1 each Engine Lathes, 11 in. x 4 and 5 ft.
1 " " " 13 in. x 5, 6 and 8 ft.
1 Engine Lathe, 14 in. x 5, 6 and 8 ft.
1 " " 16 in. x 6 ft.
1 each, Engine Lathes, 16 in. x 6, 7, 8 and 10 ft.
1 Engine Lathe, 18 in. x 6, 8, 10 and 12 ft.
1 " " 20 in. x 8, 10, 12, 14 and 16 ft.
1 " " 22 in. x 8, 10, 12, 14 and 16 ft.
1 " " 24 in., any length of bed to 26 ft.
1 " " 26 in., " " " 26 ft.
1 " " 28 in., " " " 46 ft.
1 " " 28 in., " " " 28 ft.
1 " " 30 in., " " " 28 ft.
1 " " 36 in., " " " 29 ft.
1 " " 42 in., " " " 28 ft.
1 " " 48 in., " " " 29 ft.
1 " " 15 in. x 4, 6 and 8 ft. Rod feed only.
1 each, Turret Lathes, 13 and 14 in. x 14 in x 6 ft.
1 Fox Turret Lathe, 16 in. x 6 ft.
1 Fox Lathe, 15 in. x 5 ft. Round arbor.
1 each, Hand Lathes, 10, 12, 15 and 18 in. swing.
1 Iron Planer, 18 in. x 18 in. x 3 ft.
1 each, Iron Planers, 20 in. x 20 in. x 4 and 5 ft.
1 Iron Planer, 24 in. x 24 in. x 6 ft.
1 each, Iron Planers, 26 in. x 26 in. x 7 and 10 ft.
1 Iron Planer, 30 in. x 30 in. x 10 ft.
1 " " 36 in. x 36 in. x 10 ft.
1 each 16, 20, 22, 23, 25, 28, 30, 34 and 38 in. Upright Drills.
1 each, Nos. 2, 3, 4 and 6 Spindle Gang Drills.
1 each 8, 10, 12, 15, 18 and 24 in. Shapers.
1 each, Nos. 1, 2, 3 and 4 Milling Machines.
1 No. 2 Milling Machine. Lincoln Pattern.
1 New Pattern Milling Machine. Grant & Bogert.
1 each, Nos. 2, 4, 5 Wire Feed Screw Machines.
1 each, Nos. 3 and 7 Spindle Nut Tapper.
1 Boring and Turning Mill, each 50 and 72 in.
1 Gray's Screw Machine, to take all sizes to 1 in.
1 32 in. Gear Cutter.
1 Grant & Bogert Cutter Grinder.
1 12 in. x 20 in. Cylinder Horizontal Engine.

SECOND-HAND.

1 Engine Lathe, 15 in. x 6 ft. Chelsea Machine Co.
1 Engine Lathe, 24 in. x 8 ft. Fair order, with taper attachment.
1 Lathe, 84 in. x 19 ft.
1 Planer, 27 in. x 27 in. x 45 ft.
1 " 37 x 37 x 9 ft.
1 " 24 x 24 x 7 ft. attachment.
1 " 50 in. x 50 in. x 17 ft.
1 Crank Planer.
1 9-in Shaper.
1 Lincoln Pattern No. 2 Millers.
1 Bolt Cutter, to take sizes to 1 inch.
1 Horizontal Boring Machine, 36-in. swing, will take 6 feet between centres.
1 30-in. Plain Upright Drill.
1 Bement Slotter, 12 in. stroke.
1 35-in. Gear Cutter.
All kinds Machinists' Tools and Supplies.

New York Agency of the Tanite Co.

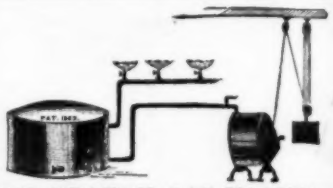
Grant & Bogert Machine Tool Works,

AND FOR THE

"New Polished" Shafting.

H. PRENTISS & CO.

42 Dey Str., New York.



THE BROUGH GAS MACHINE.

We desire to call your attention to the advantages of this Machine (patented Sept. 4, 1883,) for lighting Churches, Hotels, Dwellings, Factories, etc. There is no smoke, and it is free from condensation in pipes. It can be applied to Stoves and used for Heating Purposes. It is also sold on reasonable terms. For terms and all information address

Brough Gas Machine Works.

Office, 52 Lexington Street, BALTIMORE, MD.

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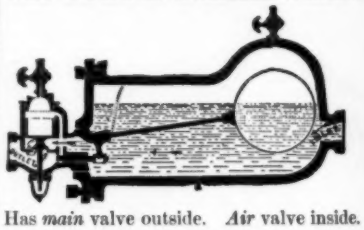
TOOLS for Machinists, Amateurs, Jewellers, Model Makers, Blacksmiths, Carpenters, Coachmakers, etc.

Send 20 cts. for **new** *Metal Worker's Catalogue, 300 Pages. Wood Worker's Catalogue free.*

TALLMAN & McFADDEN, Philadelphia, Pa.

The CURTIS STEAM TRAP.



Has *main* valve outside. *Air* valve inside.

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Curtis Regulator Co., 158 Beverly St., Boston.

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Engines and Boilers, Mills of all kinds, Marine Railways, &c. Improved Clay Tempering Machinery, Steam or Horse Power. Phosphate Machinery, Crushers, Rollers, Mixers, &c. &c.

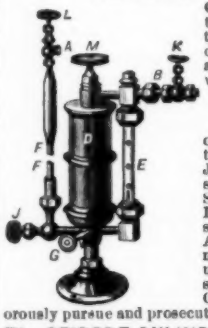
40, 42 & 44 York Street,

NEAR LIGHT, BALTIMORE.

☞ Repairing of all kinds promptly done.

The Seibert Cylinder Oil-Cup Co.

SOLE MANUFACTURERS OF



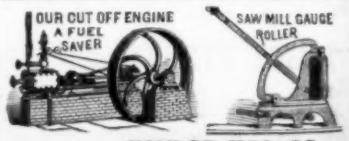
Oil Cups for Locomotives, Marine and Stationary Engine Cylinders, and the Seibert and Gates Patents with Sight Feed.

Take Notice.

The "Sight Feed" is owned exclusively by this company. See Judge Lowell's decision in the United States Circuit Court, District of Massachusetts, Feb. 23d, 1882.—All parties are hereby notified to desist the use, manufacture or sale of INFRINGING CUPS, as we shall vigorously pursue and prosecute all infringers.

The SEIBERT CYLINDER OIL-CUP CO.

53 Oliver St., Boston, Mass.



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JACKSON & TYLER, Agents, Baltimore.

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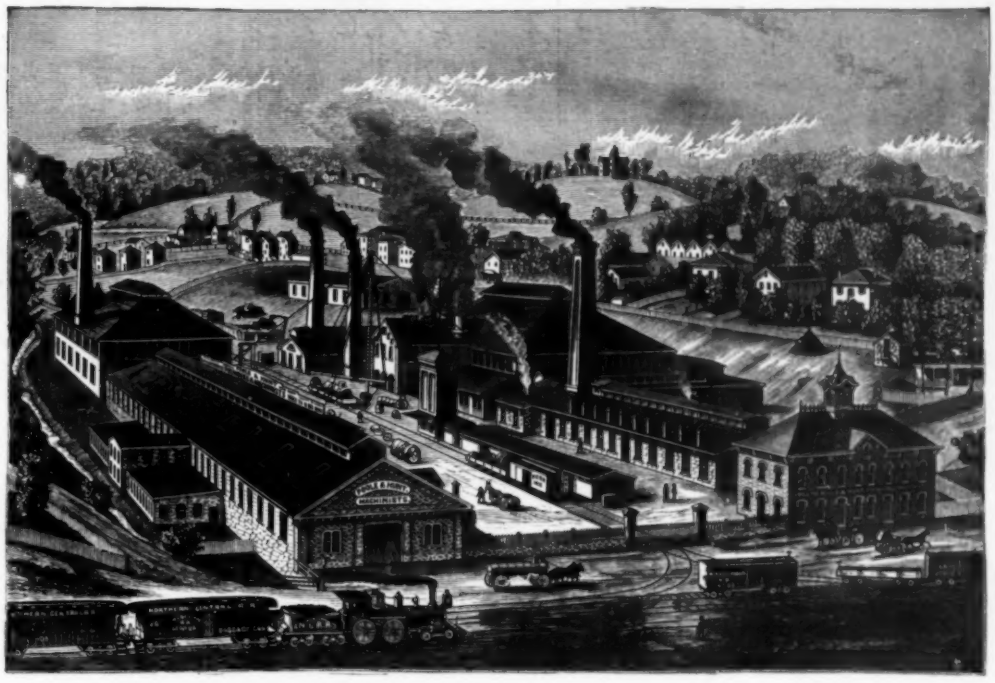
POOLE & HUNT,

Founders and Machinists.

Machine MOULDED MILL GEARING



Shafting Pulleys, HANGERS Pedestals.

Our plant for the production of **Machine-Moulded Mill Gearing** is unequaled in the country, and we are prepared to fill orders with dispatch and at great saving in cost of patterns.

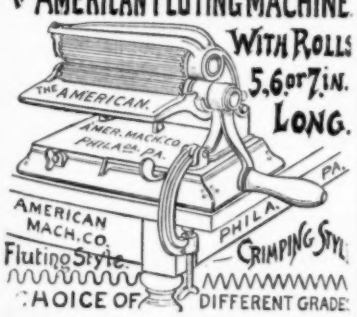
Poole & Hunt's Leffel Turbine Water-Wheel. Prices as low as any other first-class Wheel. **SHAFTING, PULLEYS, HANGERS and COUPLINGS,** of latest and most approved designs.

N. B.—Shipping Facilities the best in all directions.

POOLE & HUNT, BALTIMORE, MD

Lists of Our Gearing Mailed on Application. Send for Pamphlet. Send for Price-List.

THE AMERICAN FLUTING MACHINE. WITH ROLLS 5, 6 or 7 IN. LONG.



No. 1. CROWN HAND FLUTER.

AMERICAN MACH. CO. PHILA. PA.

THE A. M. CO. WRINGER.

No. 2. WITH ROLLS 10 IN. LONG 1¾ IN. DIAM.
No. 2½. " " 12." " 1¾." "

THE AMERICAN MACHINE CO'S, ICE CREAM FREEZERS "GEM" & "STAR".

DOUBLE ACTION FROM 2 to 14 QTS. "AMERICAN" SINGLE ACTION FROM 2 to 6 QUARTS. "CROWN" SINGLE ACTION, No. 2 to 14 QTS. DOUBLE ACTION, 8 to 32 QTS. SUPERIOR ADVANTAGES OVER ALL OTHER MAKES.

Seasonable Specialties of the American Machine Co.

PHILADELPHIA.

Baltimore Agents--MORITZ & KEIDEL, 48 and 50 German St.

PHOSPHOR-BRONZE

Trade Marks.

"Phosphor-Bronze."

The celebrated alloys in Wire, Rods, Sheets, Bolts, Wire Ropes, Wire Cloth, Castings, Ingots, etc.
Pamphlets and particulars on application to
THE PHOSPHOR-BRONZE SMELTING CO., Limited,
No. 512 ARCH STREET, PHILADELPHIA, PA.
Owners of the U. S. Phosphor-Bronze Patents.
Sole Manufacturers of Phosphor-Bronze in the United States.

THE ECONOMIC PATENT

Boiler Feed Pump

[Patented May, 1879, and February, 1883.]

NOTE.—Every one of our Cold Water Pumps is tested on a lift of 23 feet.

J. B. DAVIS & SON, Makers, Hartford, Conn.

THE ECONOMIC is a double Pump, made in the best manner in all its parts, has intermediate shaft and gears, and is complete in itself, ready to work by attaching the feed pipes to and from it and putting on driving belt.

The four valves, the only parts that can get out of order, are so constructed that they can be got at by simply unscrewing a brass cap. The gears are made from cut iron patterns, rendering them noiseless in action, and, being double-acting, makes it much easier on the driving belt, and its action smoother, and makes it cost, for the same capacity and workmanship, much below any single-acting pump. Especially valuable in sandy or muddy water, as the plain valves can be ground in a few minutes, rendering them perfect as when new.

HOT WATER.—One style is designed expressly to pump hot water.

COLD WATER.—Our cold water Pump has special features over other similar Pumps, which enables it to draft water from 20 to 25 feet, and pump to its full capacity.

☞ Duplicates of all the parts always kept in stock and can be supplied at all times.

Wood Engravings of any subject about this size and quantity of work engraved to order for $9. Larger or smaller at a proportionate rate.

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C. W. Crane

Signatures this size to order, 60 cts.

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Illustrated Price-List Free.

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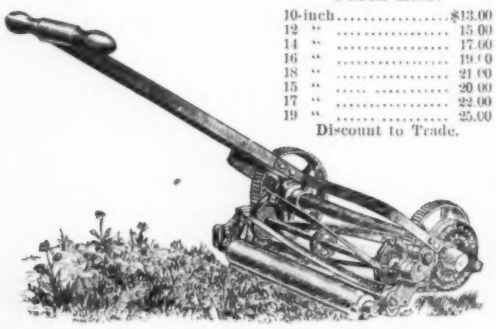
The Pennsylvania Lawn Mower.



PRICE-LIST.

10-inch	$13.00
12 "	15.00
14 "	17.00
16 "	19.00
18 "	21.00
15 "	20.00
17 "	22.00
19 "	25.00

Discount to Trade.

LLOYD & SUPPLEE HARDWARE CO., Phila.
E. WHITMAN, SONS & CO., Baltimore.

THE Pennsylvania Lawn Mower.

We defy any one to Produce its Equal.

We have now in our possession a 16-inch Pennsylvania Mower, which was sold to an institute in this State, and was used nearly every working day constantly from the day it was purchased until we got it in our possession. This Mower cut five hundred acres of grass, was sharpened but once during use, and although it has not been sharpened since it came from the ground, nevertheless will cut the finest paper. We now have it in our store on exhibition, and we only secured it by giving a new machine, the parties not wanting to part with it.

The Quaker City Lawn Mower

This is by no means an inferior Mower because at less list price. The saving in manufacture being because it is a centre cut instead of a rear cut Mower. Particularly adapted for the Southern Trade, and at the price we now offer them parties with the smallest lawns cannot well afford to permit their grass to grow wild, or be ruined by use of grass hook, sickle or scythe.

The Quaker City Lawn Mower.

REDUCED PRICE.

10 inch	$11.00
12 "	13.00
14 "	15.00
16 "	17.00

Discount to Trade.

LLOYD & SUPPLEE HARDWARE CO., Phila.
E. WHITMAN, SONS & CO., Baltimore.

LLOYD & SUPPLEE HARDWARE CO.

PHILADELPHIA.

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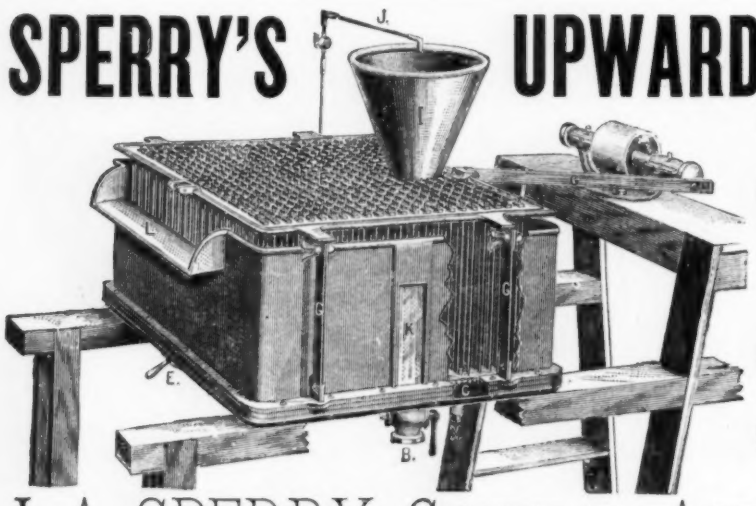
SPERRY'S UPWARD ✣ JET ✣ CONCENTRATOR,



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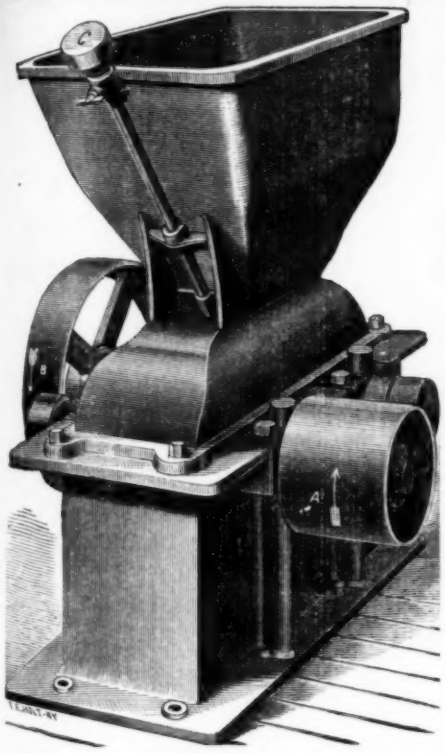

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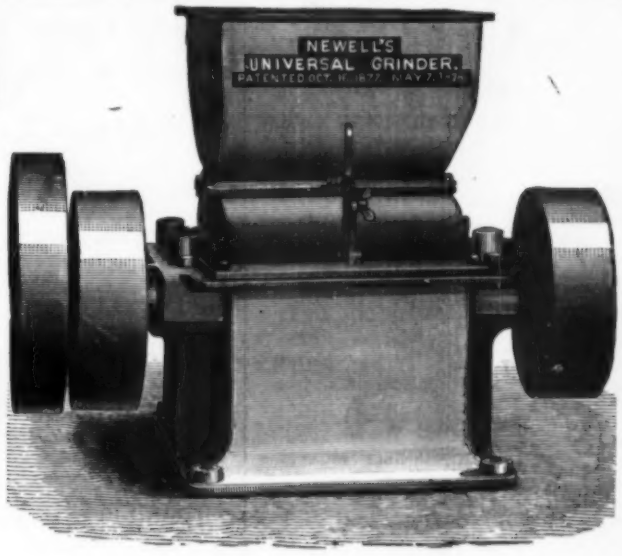

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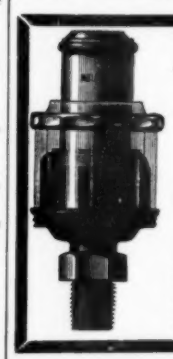

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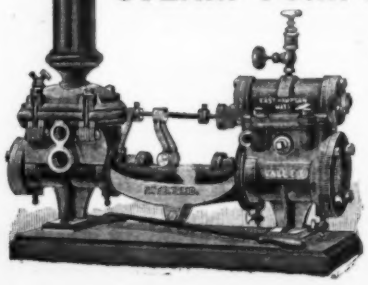

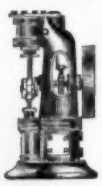

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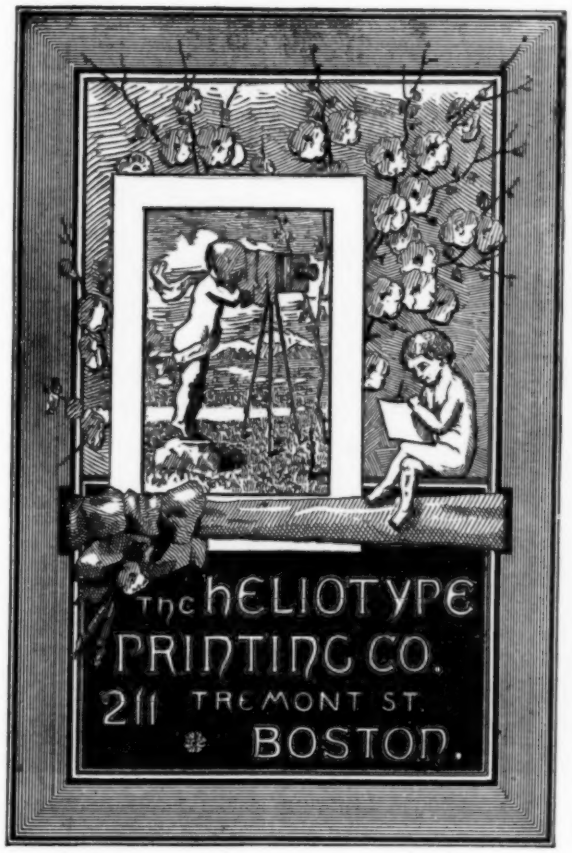

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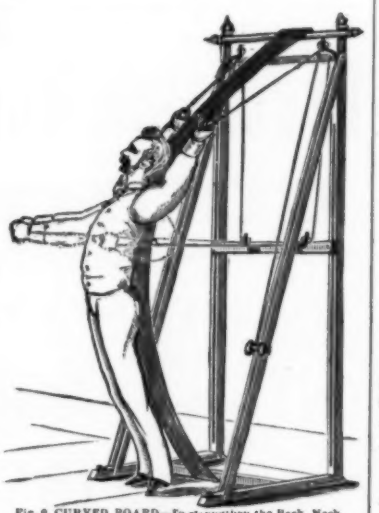

Fig. 9, CURVED BOARD—To strengthen the Back, Neck, Abdominal Muscles and Expand the Chest.

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This company confines itself to the legitimate business for which insurance has been accorded protective and encouraging legislation; it proposes to adhere strictly to business principles in its management, and to establish the fullest protection to its members in a manner the *simplest, cheapest* and *most complete* of any organization of equal safety. Membership may be acquired by letter. Apply to

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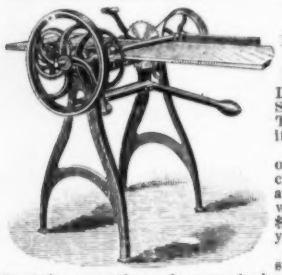

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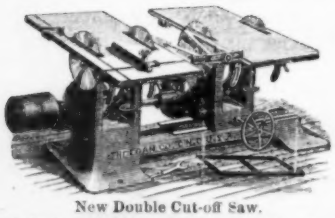

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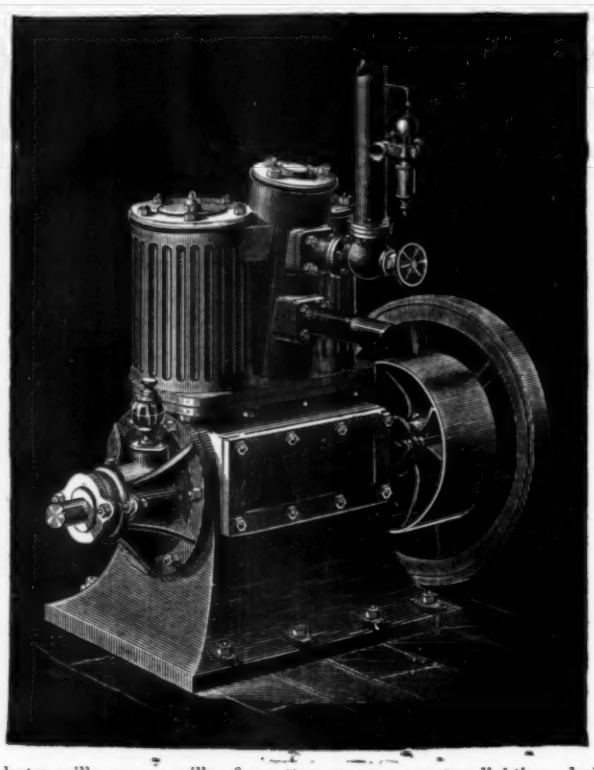

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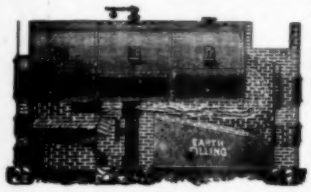

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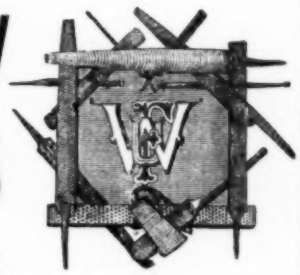

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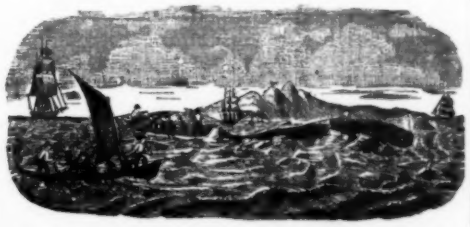

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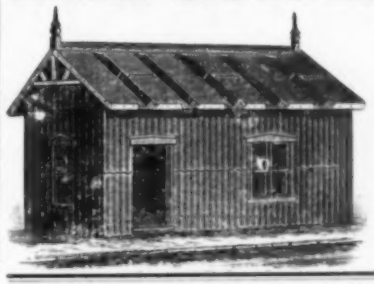

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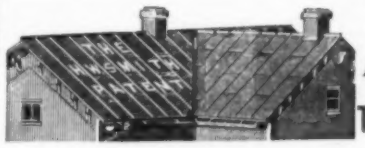

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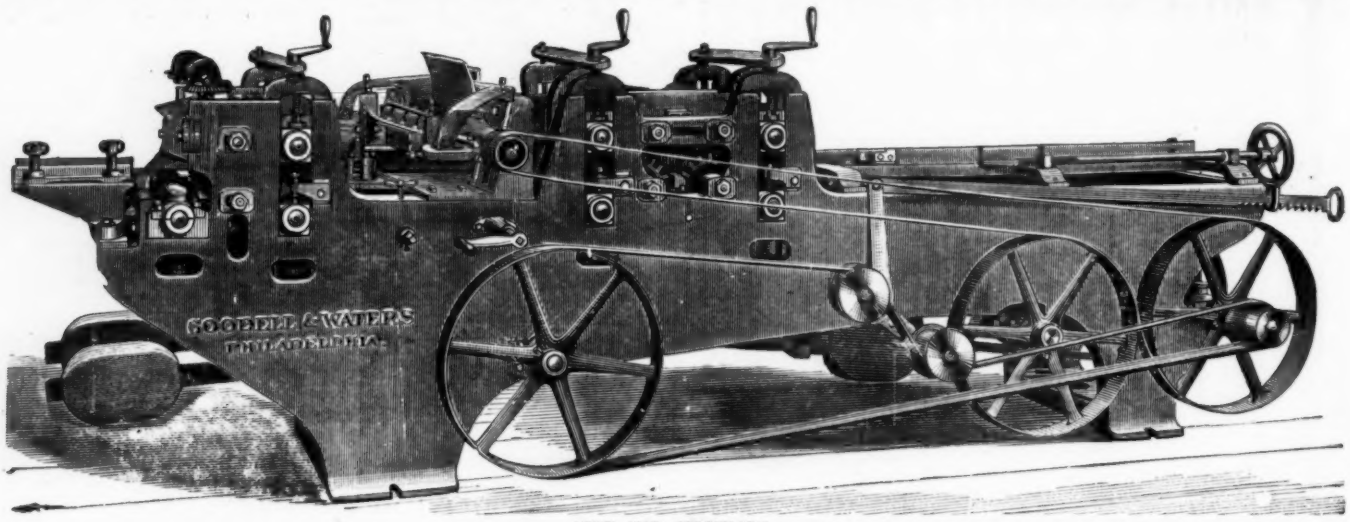

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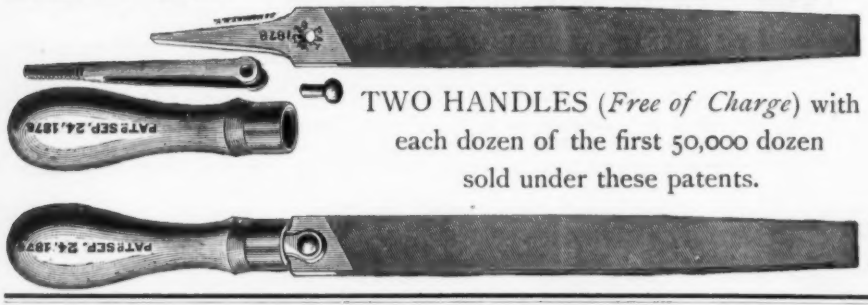

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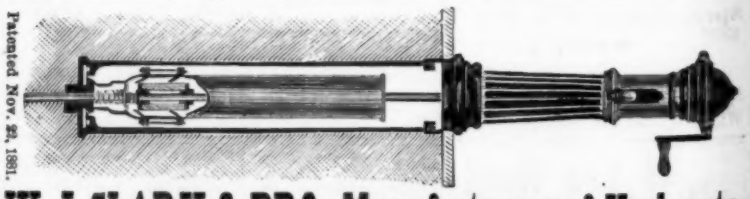

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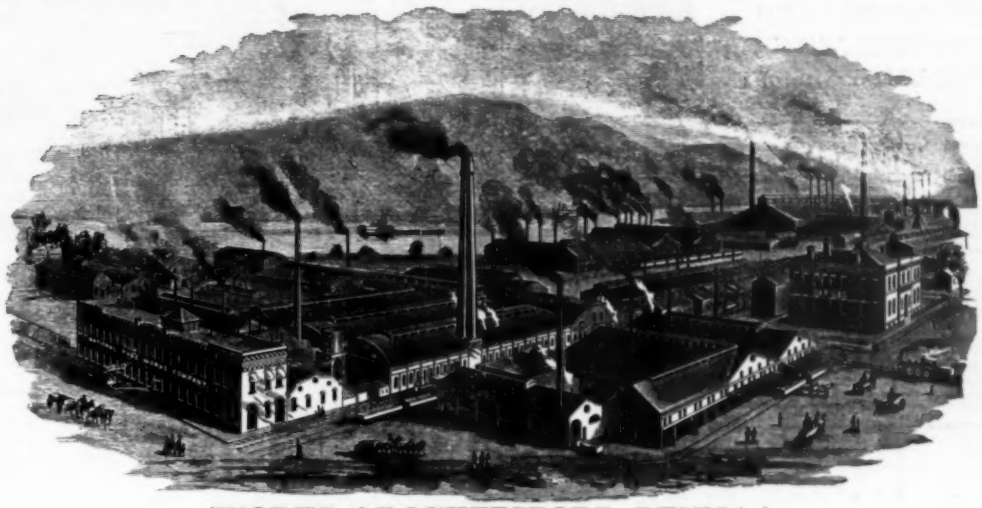

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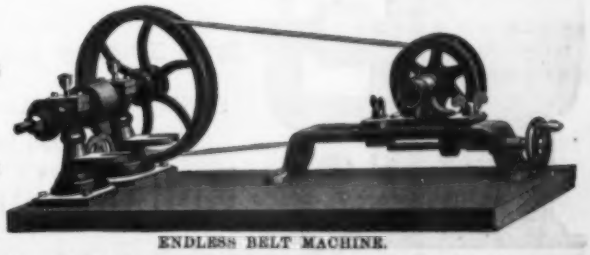

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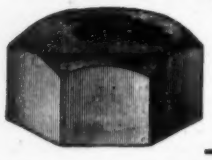

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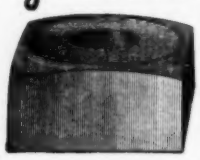

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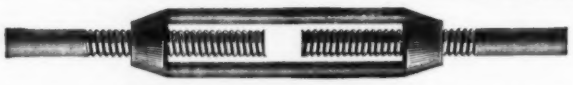

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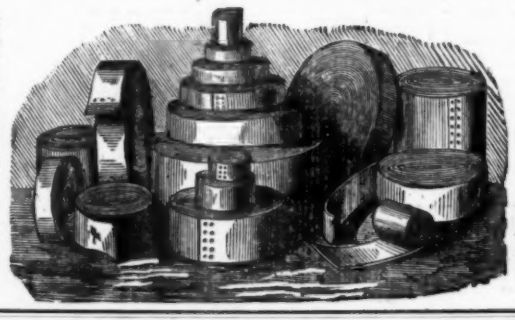

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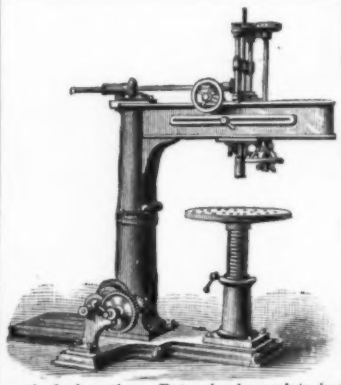

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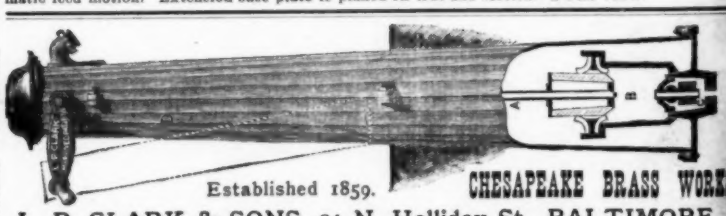

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